

# PSYCHOLOGICAL ABSTRACTS

VOL. XIII, No. 3

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## GENERAL (incl. Statistics)

1162. Adkins, D. C. A rational comparison of item-selection techniques. *Psychol. Bull.*, 1938, 35, 655.—Abstract.—A. W. Melton (Missouri).

1163. Allport, G. W. William Stern: 1871-1938. *Amer. J. Psychol.*, 1938, 51, 770-773.—A brief summary of Stern's life and his contributions to psychological thought.—D. E. Johannsen (Skidmore).

1164. Anderson, F. N., & Winlock, R. M. Psychobiology—a background for the study of personality. *Social Work Tech.*, 1938, 3, 240-246.—Psychobiology is seen as a unifying concept, emphasizing that the organism functions as a totality and that mind and body are not separate functions.—M. Keller (Butler Hospital).

1165. Baten, W. D. Elementary mathematical statistics. New York: Wiley, 1938. Pp. x + 338. \$3.00.—This book is written for students who have not studied differential and integral calculus. Formulas and fundamental relations are developed by the use of algebra, trigonometry, and analytical geometry. Each chapter contains illustrative problems and a set of practice problems. The 16 chapters cover: graphs; statistical averages; measures of dispersion; the normal curve; skewness and kurtosis; permutations, combinations and probability; Bernoulli distribution; index numbers; observational equations; correlation coefficient; sampling; non-linear regression; analysis of time series; analysis of variance; standard errors of certain statistics; and a list of statistical tables. A set of answers to the problems is appended.—J. McV. Hunt (Brown).

1166. Bennett, G. K. The relative efficiency of fine and coarse weighting of questionnaire items. *Psychol. Bull.*, 1938, 35, 642.—Abstract.—A. W. Melton (Missouri).

1167. Buel, J. An electrically controlled film slide projector. *J. exp. Psychol.*, 1938, 23, 661-664.—This apparatus is a projector of stills from 35 mm film, but has the advantages of being self-enclosed and noiseless, electrically operated, and remotely controlled by either subject or experimenter. It provides for serial presentation of any amount of material for determined exposure intervals, and has a suitable accessory for recording both the time at which exposure took place and its duration. Operation and construction details are included in the report.—H. W. Karn (Pittsburgh).

1168. Coghill, G. E. Space-time as a pattern of psycho-organismal mentation. *Amer. J. Psychol.*,

1938, 51, 759-763.—The author develops a theory in which space-time is conceived of as a pattern of mentation deriving from the motor system through a process of individuation. Mentation is one essential element of the psycho-organismal individual; it includes those processes of the cerebral cortex, thalamus, and motor system which are neither spatial (like the bodily structures) nor temporal (like the bodily functions), but it parallels those two other elements of the individual.—D. E. Johannsen (Skidmore).

1169. Conrad, H. S., & Krause, R. H. Students' tables of the unit normal curve, for abscissae expressed in terms of the probable error or *PE*: I. Areas corresponding to abscissae. II. Abscissae corresponding to areas. *J. educ. Psychol.*, 1938, 29, 491-500.—The authors give a table of the areas of the normal curve corresponding to abscissa units of .01 *PE* between 0.00 and 5.00 and units of .1 *PE* between 5.00 and 10.00. The areas are stated as percentages with at least four significant figures. A second table gives the *PE* deviation corresponding to percentages of cases above (or below) the mean. The percentage units are 0.1 between 0.0 and 45.0 and .01 between 45.0 and 45.99. The use of the *PE*, instead of  $\sigma$ , is urged.—A. W. Melton (Missouri).

1170. Cureton, E. E., & Dunlap, J. W. Developments in statistical methods related to test construction. *Rev. educ. Res.*, 1938, 8, 307-322.—A review of progress in educational statistics as a field. Developments in the nature of new instruments, machines, tests, scoring devices, statistical formulae, concepts, and procedures are summarized. References to sources of more detailed discussions are given. The main topics discussed are: scoring and computation aids; scales and scaling methods; correlation and regression; reliability; sampling theory; the analysis of causation; item analysis and validity; factor theory; and miscellaneous considerations. The summary points out that there are many new aids for scoring and computation; that there is an increasing tendency for psychophysics and mental test theory to merge; that serious efforts are being made to improve criteria in measurement, especially in their application to educational and psychological problems; that a general attack on the problem of human types of matching techniques, inverted factor theory, and pattern analysis is being made; and that several new attacks are being made on the problem of factor analysis. Specific points at which further research is needed are pointed out. A comprehensive bibliography is appended.—D. Bailey (Mary Baldwin).

1171. Dunford, R. E. A new chronoscope. *Psychol. Bull.*, 1938, 35, 672.—Abstract.—A. W. Melton (Missouri).
1172. Fisher, J. [Secr.] The bulletin of animal behaviour. London: Institute for the Study of Animal Behaviour, Regent's Park, N.W. 8. Vol. 1, No. 1, October, 1938. Quarterly.—R. R. Willoughby (Brown).
1173. Fitch, F. B. An application of symbolic logic to behavioristic psychology. *J. Phil.*, 1938, 35, 674.—Abstract.—R. R. Willoughby (Brown).
1174. Gengerelli, J. A. Toward a metric for mental functions. *J. Psychol.*, 1938, 6, 225-232.—A method of binomial analysis is presented whereby a distribution of raw scores is reducible to a manifold of  $n$  equal units and can be considered as generated by  $n - 1$  independent equally weighted unitary determiners. The value of  $n$  varies with the psychological function considered. The author presents evidence suggesting that this method is applicable when the psychological function tested is homogeneous and expressed in raw units which are sufficiently fine.—E. D. Hunt (Brown).
1175. Goldenweiser, A. The concept of causality in the physical and social sciences. *Amer. sociol. Rev.*, 1938, 3, 624-636.—I. L. Child (Yale).
1176. Halbwachs, M. Individual psychology and collective psychology. *Amer. sociol. Rev.*, 1938, 3, 615-623.—This paper deals with historical attempts to delimit fields of research between psychology and sociology, and with the philosophical presuppositions of such attempts.—I. L. Child (Yale).
1177. Harsh, C. M., & Stevens, S. S. A mechanical correlator. *Amer. J. Psychol.*, 1938, 51, 727-730.—D. E. Johannsen (Skidmore).
1178. Holzinger, K. J. Relationships between three multiple orthogonal factors and four bifactors. *J. educ. Psychol.*, 1938, 29, 513-519.—Actual data are used to illustrate that a set of tests may be expressed as linear functions of a general and several group factors, or as functions of group factors alone, and that the exact relationships between these two sets of factors may be given under certain conditions. The author lists some arguments which lead him to prefer the bifactor to the multiple-factor solution.—A. W. Melton (Missouri).
1179. Hugenholtz, P. T. Over tijd en tijdsvormen. (Time and time forms. Continued.) *Ned. Tijdschr. Psychol.*, 1938, 6, 231-254.—All four forms of time affect man, but physical time, having existential reality, is most easily grasped by our consciousness and forms a parallel to space. It can be measured approximately, but its conception necessarily involves the events occurring between two given moments. Vital time provides the connections between successive events and causes us to believe that "time heals all wounds." Moods are interpretations of vital time through which we maintain contact with the world around us.—H. Beaumont (Kentucky).
1180. Knox, G. W. Some contemporary evaluations of current Gestalt psychology. *J. Psychol.*, 1938, 6, 261-263.—The writer presents various critical evaluations of Gestalt theory with refutations of the criticisms involved, and concludes "that no one is entitled to pronounce on this system of psychology unless he has thoroughly mastered the main features of quantitative dynamics."—E. D. Hunt (Brown).
1181. Korzybski, A. General semantics. New York: Arrow Editions, 1938. Pp. iii + 111.—This is a collection of the papers presented at the first American congress for general semantics. The first 28 pages are devoted to an outline of the subject by Korzybski, in which general semantics is defined as a new experimental branch of natural science underlying an empirical theory of human evaluations and orientations. Intensional orientations, based on verbal definitions and disregarding observations, are distinguished from extensional orientations, based on ordering observations. The former are seen to cause most human difficulties because they serve as psycho-logical prejudices and nervous blocks. Extreme examples are arguments about absolutes and paranoid delusions. Extensional orientations, termed operationalism by Bridgman, allow for flexibility in theory formation in physico-mathematical sciences. Such scientizing and mathematizing should be accepted as data to be used in the understanding of human neurosymbolic reaction mechanisms, as should delusions, and as Pavlov's experiments in conditioning have been used for the dog. An international program, designed to save humanity from itself, is presented, and the rest of the publication is devoted to groups of short papers on the relation between general semantics and the various branches of science and education by adherents of those branches.—J. McV. Hunt (Brown).
1182. Lewin, K. The conceptual representation and measurement of psychological forces. *Contr. psychol. Theor.*, 1938, 1, No. 4. Pp. 247. \$2.00.—This monograph is intended as the first part of a "vector psychology," which in combination with the author's former volume on topological psychology will constitute an outline of a conceptual framework for psychology. An attempt is here made to describe the position of the concept of force in psychology and to discuss major methods of measuring psychological forces. One of the outstanding properties of force is its directedness. Direction in psychology cannot be defined as physical direction and cannot be determined by Euclidian geometry. A geometry applicable in psychology is that of hodological space. The geometrical properties of this space are described, and examples of its application in determining directions and distances in the life space are offered. The conceptual properties of the construct of force are given, as well as a definition co-ordinating it with observable processes. The conceptual and dynamic relation between psychological forces, valences, and tensions are discussed, as are certain basic theories concerning the relation between need.

environment, and the "mechanics" of locomotion. Various methods of measuring forces and valences are surveyed, especially those related to opposing forces and to velocity of locomotion, including velocity and restlessness, consumption, translocation, and learning. The problem of the structure of the force field and of overlapping force fields is discussed, including several choice and conflict situations with stable and labile equilibria. The discussion is limited mainly to relatively simple problems of driving and restraining forces.—S. Rosenzweig (Worcester State Hospital).

1183. Loucks, R. B. Preliminary note on a general purpose recording technique. *J. Psychol.*, 1938, 6, 243-245.—The author describes the use of a cathode-ray oscilloscope with a long-persistence recording screen to obtain complete records in conditional response experiments.—E. D. Hunt (Brown).

1184. Murray, E. The Cornell optical laboratory. *Amer. J. Psychol.*, 1938, 51, 734-736.—D. E. Johannsen (Skidmore).

1185. Ness, A. "Truth" as conceived by those who are not professional philosophers. Oslo: Jacob Dybwad, 1938. Pp. 178.—Some philosophers, in the course of their attempt to discover what truth is, have made statements as to what non-philosophers believe truth is. But what non-philosophers believe truth is can be investigated scientifically. The author believes that this "sound scientific problem" is "involved in philosophical discussions of the truth notion." His investigation of it consisted in the collection and comparison of verbal reactions describable as definitions of truth, made by non-philosophers when stimulated by an appropriate questionnaire. Among the results obtained, the principal one appears to be that non-philosophers have "no general opinion on the notion of truth, neither explicit nor implicit, which distinguishes them—as a group—from philosophers."—C. J. Ducasse (Brown).

1186. Olson, W. C. Proceedings of the forty-sixth annual meeting of the American Psychological Association, Incorporated, Columbus, Ohio, September 7, 8, 9, 10, 1938. *Psychol. Bull.*, 1938, 35, 579-725.—A. W. Melton (Missouri).

1187. Piéron, H., & Meyerson, I. Onzième congrès international de psychologie. Paris, 25-31 Juillet 1937. Rapports et comptes rendus. (Eleventh international psychological congress, held at Paris, July 25-31, 1937. Reports and abstracts.) Paris: Alcan, 1938. Pp. 571. 100 fr.—The main section of the congress consisted of five symposia: (1) *Morphology of movement*, with papers by A. Michotte, Etude morphologique des réactions motrices; J. W. Cox, The organization of skilled movements; P. Fraisse, La structure temporelle des mouvements volontaires rythmés; (2) *The law of effect in learning and its interpretation*, by K. Koffka; (3) *The acquisition of habits*, with papers by F. J. J. Buytendijk, Die Erwerbung neuer Gewohnheiten

als Lebenserscheinung; C. S. Myers, On the acquisition of habits; and T. H. Pear, The nature of clumsiness; (4) *Motor and mental development in the child*, with papers by M. Gourevitch, Le développement moteur et mental chez l'enfant; H. Wallon, Développement moteur et mental chez l'enfant; and L. Carmichael, Fetal behavior and developmental psychology; and (5) *Animal behavior and human conduct*, with papers by G. Révész, Die soziobiologische Funktion der menschlichen und tierischen Hand; and D. Katz, Die Bedeutung der Tierpsychologie für die menschliche Psychologie. Besides these symposia, the following papers were given: P. Janet, Les conduites sociales; E. D. Adrian, The psychological interpretation of the electro-encephalogram; W. McDougall, Tendencias, as indispensable postulates of all psychology; J. Piaget, Le problème de l'intelligence et de l'habitude: réflexe conditionné, "Gestalt" ou assimilation; R. Thurnwald, Der kulturelle Hintergrund primitiven Denkens; K. Bühler, Der dritte Hauptsatz der Sprachtheorie; Anschauung und Begriff im Sprechverkehr; and E. Claparède, Psychologie de la compréhension internationale. Another section of the congress was devoted to nine round table conferences, which were composed of a limited number of specialists in each field: (1) *The vocabulary of psychology*: introductory remarks by Claparède, the chairman of this round table, and a report by C. M. Prot, Sur le vocabulaire psychologique; (2) *The psychological interpretation of electroencephalograms*: H. Berger, Das Elektrenkephalogramm des Menschen und seine psychophysiologische Deutung; H. H. Jasper, The fundamental refractoriness of certain cortical neurones; H. Rohrer, Zur psychologischen Interpretation der Elektrenkephalogramme; E. D. Adrian, L'interprétation psychologique des électrencéphalogrammes; J. G. Dusser de Barenne, Sensori-motor cortex and optic thalamus; and G. Kreezer, The electroencephalogram in mental deficiency; (3) *Linguistic psychology*: V. Broendal, Les oppositions linguistiques; L. Hjemsløv, La structure des oppositions dans la langue; J. M. Korinek, Zur lautlichen Struktur der interjektionalen Sprachgebilde; J. Kurylowicz, Lois générales de changement linguistique; A. Martinet, Remarques sur la notion d'opposition comme base de la distinction phonologique; and J. Przyluski and others, La méthode en linguistique; (4) *The psychophysiology of acoustics*: H. Fletcher, A study of loudness; C. W. Bray & E. G. Wever, Distortion in the ear; S. S. Stevens, Aural harmonics and combination tones; E. McCrady, E. G. Wever, & C. W. Bray, The electrical response of the opossum's cochlea after experimental cochlear lesions; A. F. Rawdon-Smith, Auditory inhibition and certain physiological parallels; E. N. Harvey, A. L. Loomis, & G. A. Hobart, Conditioning of the alpha rhythm of the brain to auditory stimuli; S. Kagan, Les caractéristiques de l'audiomètre et deux modèles de réalisation; A. Stefanini, Del numero di oscillazioni che occorrono per eccitare i risonatori cocleari; G. V. Gersuni & A. A. Arapova, On the pitch of tone in electrical stimulation of the organ of



hearing; and F. Canac, Le seuil de sensation et ses variations avec l'intensité des bruits ambiants; leurs rapports avec le tempérament; (5) *Interpretation of the mathematical theory of factors*: E. Farmer, A study in mental integration; R. Meili, Facteurs psychologiques et facteurs mathématiques; W. Stephenson, Type psychology and its factor representation; and R. H. Thouless, Factor analysis in problems of perception; (6) *Hallucinations*: G. E. Morselli, Hallucinations; C. Blondel, Des hallucinations; H. Ey, La structure illusionnelle de l'activité hallucinatoire; H. W. Gruhle, Hallucinations; A. Ley & M. Sosset, L'hallucination et la croyance; P. Schröder, Hallucination; and E. Wolff, La place des hallucinations lilliputiennes dans une théorie générale de l'hallucination; (7) *Constructive thinking and invention*: introduction by Claparède; J. Bahle, Konstruktiver Arbeitstypus und Inspirationstypus im Schaffen der Komponisten; E. de Boda, Sur la pensée constructive et l'invention; S. H. Brown, A logician looks at Karl Duncker's study of productive thinking; C. Fox, La pensée constructive et l'invention; and C. Lalo, L'invention artistique; (8) *Emotions in relation to nervous and neurohumoral functions*: J. G. Beebe-Center & S. S. Stevens, Cardiac acceleration in emotional situations; T. Brosse, L'énergie consciente facteur de regulation psycho-physiologique; O. Klemm, Die ganzheitspsychologische Theorie der Gefühle; and M. Wittkover, Some observations on the influence of emotions on bodily functions; and (9) *Motor adaptation in mental life*: A. Gemelli & M. Ponso, L'adaptation motrice dans la vie psychique; F. Banisconi, I processi di adattamento psicomotrio nelle azioni di un gruppo; E. Bonaventura, L'inhibition dans l'adaptation motrice; R. Calabresi, L'adaptation psychomotrice dans les illusions cinétiques de direction; contrôle objectif de données subjectives; A. Costa, Apprentissage moteur chez des aveugles; A. Filippini, De l'adaptation psychomotrice à la conduite du sujet; A. Gesell, Limitations in motor interpretations of mental life; O. Klemm, Motorische Anpassung unter den Gesichtspunkten der Ganzheitspsychologie; and T. Rutten, La Gestalt comme principe fonctionnel dans la conduite humaine. Many other short papers and discussions were presented, the abstracts of which are to be found in this volume.—G. Goldman (Sorbonne).

1188. Richardson, M. W. **Multidimensional psychophysics.** *Psychol. Bull.*, 1938, 35, 659-660.—Abstract.—A. W. Melton (Missouri).

1189. Tinker, M. A., & Baker, K. H. **Introduction to the methods of experimental psychology.** New York: Appleton-Century, 1938. Pp. vi + 222. \$2.75.—The chief emphasis of this manual for the beginning laboratory course is upon method. A wide variety of experiments has been selected to introduce the student to the methods of collecting data now current in psychological research. Traditional experiments in sensation and perception are lacking. Elementary statistical procedures are described and their usefulness demonstrated. Ap-

paratus requirements are very meager. The experiments used include: 1 on the organization and treatment of group data (including the use of graphic methods); 2 on visual phenomena, one using the method of paired comparisons for the measuring of preferences; 6 on learning; 1 on the use of measures of variability; 3 on problem solving and the development of concepts; 1 each on the judgment of emotions from photographs, the estimation of temporal intervals, memory and attention value of advertisements, and judgment of intelligence from photographs; 6 on the measurement of general and specific abilities (including applications of the coefficient of correlation); 5 on personality measurements (including the use of the profile). The appendix furnishes statistical tables, complete descriptions of the apparatus used, and the photographs required by two of the experiments. Norms for the tests employed are included with each experiment, so that it is unnecessary to collect large amounts of class data.—K. H. Baker (Minnesota).

1190. Trurnit, H. J. **Weitere Untersuchungen über die Wärmebildung des Kaltblütterrückenmarkes. I. Die technischen Hilfsmittel.** (Further investigations concerning heat production in the spinal cords of cold-blooded animals. I. Apparatus.) *Z. Biol.*, 1938, 99, 97-107.—This article describes apparatus by means of which the temperature of preparations can be varied quickly, with measurement of relative and absolute changes. There is a three-element thermostat, and a water circulating system is incorporated into the walls of the measuring chamber.—P. L. Krieger (Leipzig).

1191. Volkman, J. **The compression of an absolute scale.** *Psychol. Bull.*, 1938, 35, 676.—Abstract.—A. W. Melton (Missouri).

1192. Volkman, J., & Gerbrands, R. **A timing relay for psychophysical experiments.** *Amer. J. Psychol.*, 1938, 51, 731-733.—D. E. Johannsen (Skidmore).

1193. Weinberg, C. B. **Protocols, communicability, and pointer readings.** *J. Phil.*, 1938, 35, 651-655.—Protocols must be so stated that psychology does not become logically prior to the other sciences. Moreover, they should be grammatical sentences in order that there be intelligible communication. It is possible to make protocols agreeable in common, or intersubjective, by having them describe well-connected chains of sensory experiences. Protocols employed in technical experiments are not merely reducible to "pointer readings," but involve connected statements whose connection is logically determined by some theory of measurement.—J. G. Miller (Harvard).

1194. Wherry, R. J. **Orders for the presentation of pairs in the method of paired comparisons.** *J. exp. Psychol.*, 1938, 23, 651-660.—This article is devoted to an ordering scheme for the presentation of pairs, in the method of paired comparisons, which takes into account the following principles: (1) elimination of space and time errors; (2) avoidance of regular repetitions which might influence judg-



ment; (3) maintenance of the greatest possible spacing between pairs involving any given number of the stimulus group; (4) balancing out the effects of fatigue.—*H. W. Karn* (Pittsburgh).

1195. Wherry, R. J. Maximum prediction with a minimum number of variables. *Psychol. Bull.*, 1938, 35, 658-659.—Abstract.—*A. W. Melton* (Missouri).

1196. Zeddies, A. *Lebensführung und Lebensgestaltung*. (The conduct and pattern of life.) (2nd ed.) Homburg: Siemens-Verlagsges., 1938. Pp. 24.—*R. R. Willoughby* (Brown).

1197. Zubin, J. A technique for measuring like-mindedness. *J. abnorm. soc. Psychol.*, 1938, 33, 508-516.—The technique presented subdivides a group into subdivisions of like-minded or like-structured individuals with reference to a given social criterion. This technique consists of three steps: the obtaining of agreement scores of each individual responding to the personal inquiry form with all the subjects; tentative division of the group on the basis of these agreement scores; determination of the pattern that produces the agreement in each subdivision. The method can be applied to many fields, including such diverse areas of interest as the pattern of family expenditures and the classification of institutions. Mechanical devices are available for simplifying the actual labor of scoring and calculation.—*C. H. Johnson* (Portland, Ore.).

1198. Zubin, J. A statistical approach to typology. *Psychol. Bull.*, 1938, 35, 655-656.—Abstract.—*A. W. Melton* (Missouri).

[See also abstracts 1316, 1344, 1384, 1414, 1473, 1516, 1520, 1683, 1721, 1729, 1736.]

## NERVOUS SYSTEM

1199. Boyd, T. E., Brosnan, J. J., & Maaske, C. A. The summation of facilitating and inhibitory effects at the mammalian neuromuscular junction. *J. Neurophysiol.*, 1938, 1, 497-507.—*M. A. Rubin* (Worcester State Hospital).

1200. Brill, J. A., & others. The nervous system; a guide for use with the education sound picture "The Nervous System." Chicago: Univ. Chicago Press, 1938. Pp. 34. \$0.15.—*R. R. Willoughby* (Brown).

1201. Culler, E. A. Observations on direct cortical stimulation in the dog. *Psychol. Bull.*, 1938, 35, 687-688.—Abstract.—*A. W. Melton* (Missouri).

1202. Dagnelle, J., Durieu, H., & Govaerts, J. Contribution à l'étude de la voie sensitive phrénique chez l'homme. (Contribution to the study of the sensory phrenic pathway in man.) *C. R. Soc. Biol., Paris*, 1938, 127, 1463-1464.—The authors describe a case which gives crucial evidence that the stellate ganglion serves as an obligatory passageway for phrenic sensitivity.—*G. Goldman* (Sorbonne).

1203. Darrow, C. W., & Solomon, A. P. The autogram in the study of psychotic states.

*Psychol. Bull.*, 1938, 35, 645-646.—Abstract.—*A. W. Melton* (Missouri).

1204. Dow, R. S., & Bogaert, L. v. On complex involuntary movements appearing late following the resection of a cerebellar hemisphere. *J. belge Neurol. Psychiat.*, 1938, 38, 803-807.—The case of a patient is presented who had been observed over a period of 9 years and who seven months after removal of the left cerebellar hemisphere developed two types of involuntary movements in the left upper extremity, one a fine tremor present in repose, suggesting in some respects a parkinsonian tremor, and the second irregular gross movements of the upper extremity. The authors advance the hypothesis that the ablation of the left cerebellar hemisphere and with it the destruction of the dentate nucleus caused a degeneration of the red nucleus and certain thalamic nuclei of the opposite side. They point out, however, that no verification of this or any other hypothesis is possible at this time.—*H. Syz* (Cornell).

1205. Grass, A. M., & Gibbs, F. A. A Fourier transform of the electroencephalogram. *J. Neurophysiol.*, 1938, 1, 521-526.—A method is described whereby the distribution of frequencies in a given strip of electroencephalographic record may be obtained automatically.—*M. A. Rubin* (Worcester State Hospital).

1206. Grinker, R. R., & Serota, H. Studies on cortico-hypothalamic relations in the cat and man. *J. Neurophysiol.*, 1938, 1, 573-589.—The electrical activity of the hypothalamus differs from that of the cerebral cortex. The effects of various chemical agents on these structures are described. Electrical stimulation of the hypothalamus alters the potential pattern of that region, the changes in the cortical electrogram probably being secondary to those in the hypothalamus. "Emotional" stimuli have an effect on the hypothalamus and the cortex which is similar to that elicited by electrical stimulation.—*M. A. Rubin* (Worcester State Hospital).

1207. Halstead, W. C. Experimental analysis of the effects of pre-frontal lobectomy in man. *Psychol. Bull.*, 1938, 35, 687.—Abstract.—*A. W. Melton* (Missouri).

1208. Himmelmann, W., & Rosemann, H. U. Über die Wirkung des Nikotins auf das Aktionspotential der Netzhaut. (The effect of nicotine on the action potential of the retina.) *Z. Biol.*, 1938, 99, 147-157.—The effect of different concentrations of nicotine on the action potentials of frog retina exposed to light is studied by means of a cathode-ray oscillograph. The drug clearly decreases the amplitude of the positive light response, but the original height is soon reached again. When a more concentrated solution is applied, there is no recovery from the early depressed level. The "off" effect can be checked by large amounts of nicotine, but it is uninfluenced by more dilute solutions, which affect the "on" response. The observed changes are irreversible, and develop independently of the state of adaptation of the eyes.—*P. L. Krieger* (Leipzig).

1209. Keller, A. D. Separation in the brain stem of the mechanisms of heat loss from those of heat production. *J. Neurophysiol.*, 1938, 1, 543-557.—*M. A. Rubin* (Worcester State Hospital).

1210. Kennard, M. A. Reorganization of motor function in the cerebral cortex of monkeys deprived of motor and premotor areas in infancy. *J. Neurophysiol.*, 1938, 1, 477-496.—Recovery of motor performance after ablation of motor and premotor cortex is much greater in the infant than in the adult monkey. The restitution of function is due to integration from the frontal association areas and the postcentral regions. The effects of various cortical ablations on posture and reflex activity are described and discussed.—*M. A. Rubin* (Worcester State Hospital).

1211. Krainsky, N. W. *Nerven-psychische Emission und Radio-Prozesse im lebenden Organismus*. (Neuro-psychological emission and radio processes in living organisms.) *Monatsberichte*, 1936, 1, 13-54.—Upon both theoretical and experimental grounds the author draws a detailed analogy between radio-physical phenomena and neuro-psychological phenomena. The human body with its various sense organs serves as a detector of radio-like frequencies which emanate from objects in nature or other individuals. But the nervous system, especially the brain, is also a generator, and transmits radio-like waves, which may "induce" (electrically) reactions in others. Numerous microscopic slides are presented to show certain cortical cells as "cell antennae," others as "inductors," etc. Various psychological phenomena, such as paranoid states, hallucinations, clairvoyance, and telepathy are discussed from this point of view.—*G. F. J. Lehner* (Vermont).

1212. Kreezer, G. The electro-encephalogram and its use in psychology. *Amer. J. Psychol.*, 1938, 51, 737-759.—The author describes briefly the methods of determining cortical electrical potentials (EEG). He then analyzes the results already obtained by this technique from the point of view of its use as an indicator of psychological processes. He suggests that two attitudes can be taken: (1) Since the electrodes are attached to the scalp it appears that they must record the activity of large masses of cells, and it is unlikely that such organizations are associated with specific psychological phenomena. (2) On the other hand, it is always possible that EEG might serve as a psychophysiological indicator, and thus contribute to an understanding of the cortical factors upon which psychological phenomena depend. It is suggested that enough evidence has been accumulated to justify the tentative acceptance of the second point of view, although much specific empirical work remains to be done to prove it.—*D. E. Johanssen* (Skidmore).

1213. Lemere, F. Effects on electroencephalogram of various agents used in treating schizophrenia. *J. Neurophysiol.*, 1938, 1, 590-595.—The tendency toward a poor alpha rhythm in schizophrenia, which is probably an inborn neurophysio-

logical characteristic of schizophrenia, is temporarily enhanced by insulin, metrazol, sodium amytal, carbon dioxide, and emotional stimulation. Since these agents do not produce permanent enhancement of the alpha rhythm, it is suggested that they cause only temporary clinical improvement.—*M. A. Rubin* (Worcester State Hospital).

1214. Marquis, D. G., & Williams, D. J. The central pathway in man of the vasomotor response to pain. *Brain*, 1938, 61, 203-220.—The central neural mechanism of the vasoconstrictor response to sensory stimuli has been investigated by plethysmographic recording of vasomotor changes in 5 normal subjects and 15 patients with discrete lesions of the nervous system involving the sensory pathway. It has been found that in normal subjects the vasoconstrictor responses to equal stimuli on symmetrical skin areas are equal, and that they vary directly with the intensity of the stimulus. In 10 subjects with lesions of the sensory pathway below the level of the thalamus the vasomotor response varied directly with the change in the subjective appreciation of the stimuli, while in 5 subjects with lesions of the sensory tracts in the thalamus or cerebrum, there was no effect on magnitude of the vasoconstrictor response. The evidence presented suggests that in man the ascending pathway for the vasomotor response to somatic stimulation is the spinothalamic tract, and that the vasomotor reflex arc is complete in the brain-stem below the level of the sensory thalamus.—*W. Marshall* (Appleton Clinic, Wis.).

1215. Masserman, J. H. The effects of penta-methylenetetrazol (metrazol) on the functions of the hypothalamus of the cat. (Film.) Chicago: Univ. Chicago Clinics, 1938. 100 feet. 16 mm. \$5.00.—The injection of 0.1 cc. of a 10% solution of metrazol into the hypothalamus of a prepared, unanesthetized cat increases the responses of this structure to faradic stimulation and results in spontaneous vegetative hyperactivity, as manifested by cyclodilation, pilo-erection, urination, defecation, and marked emotional mimetic excitement. These effects wear off in 30 to 60 minutes.—*J. H. Masserman* (Chicago).

1216. Masserman, J. H. The effects of picrotoxin on the functions of the hypothalamus of the cat. (Color motion picture film.) Chicago: Chicago Clinics, 1938. 300 feet. 16 mm. \$15.00.—The injection of 0.1 cc. of a 1:10,000 solution of picrotoxin into the hypothalamus of a prepared, unanesthetized cat increases the electrical responses of this structure and causes intense vegetative and emotional mimetic activity which goes on to exhaustion and death.—*J. H. Masserman* (Chicago).

1217. Pennington, L. A. Bilateral versus unilateral function of the auditory cortex. *Psychol. Bull.*, 1938, 35, 686.—Abstract.—*A. W. Melton* (Missouri).

1218. Rioch, D. McK. Certain aspects of the behavior of decorticate cats. *Psychiatry*, 1938, 1, 339-345.—The general behavior of decorticate cats

may be described as a series of stereotyped reaction patterns. Such patterns include the following: sleeping; standing; sitting; walking; micturition; defecation; feeding; responses to rubbing or stroking; pseudo-affective "attention," "fighting," "rage," "fear," "pleasure," and some sexual behavior. These patterns of behavior interact in such a way that either one or another is overtly expressed, but combinations or mixtures of the patterns are not seen. It is concluded that the concepts of localization of normal emotion in the thalamus and hypothalamus, and of the mood changes which follow emotional reactions, are invalid.—*M. Grotjahn* (Chicago Institute for Psychoanalysis).

1219. Riach, D. McK., Nelson, C., & Dempsey, E. W. Certain effects of prolonged stimulation of afferent nerves on the reflexes evoked. *J. Neurophysiol.*, 1938, 1, 533-542.—*M. A. Rubin* (Worcester State Hospital).

1220. Rosenblueth, A., Klopp, C. T., & Simeone, F. A. A further study of the crossed phrenic phenomenon. *J. Neurophysiol.*, 1938, 1, 508-520.—*M. A. Rubin* (Worcester State Hospital).

1221. Rubin, M. A., & Freeman, H. The influence of cyanide on brain potentials in man. *J. Neurophysiol.*, 1938, 1, 527-532.—Intravenous injection of sodium cyanide into schizophrenic patients caused an enhancement of the alpha rhythm. In a narcoleptic and a stuporous catatonic patient it resulted in the appearance of regular, large slow waves. Both effects of cyanide are interpreted as due to the direct action of the chemical on cortical neurons.—*M. A. Rubin* (Worcester State Hospital).

1222. Savage, A. E. A comparison of the nervous system in normal and sinistral snails of the species *Campeloma rufum*. *Amer. Nat.*, 1938, 72, 160-169.—The nervous system of the dextral individual is first described. "In the sinistral snails, the arrangement of most of the body organs, the nerve ganglia and the nerve trunks are the exact reverse of their arrangement in the dextral specimens."—*C. N. Cofer* (Brown).

1223. Smith, D. E. Cerebral localization in somesthetic discrimination in the rat. *Psychol. Bull.*, 1938, 35, 685-686.—Abstract.—*A. W. Melton* (Missouri).

1224. Sugar, O., & Gerard, R. W. Anoxia and brain potentials. *J. Neurophysiol.*, 1938, 1, 558-572.—Studies of the electrical activity of the brains of cats during and after complete temporary anemia of the brain reveal that there are gradients of metabolic activity which parallel developmental, functional and structural ones. Anemia acts primarily through anoxia. Synapses are less sensitive to anoxia than are the cortical elements responsible for spontaneous electrical activity.—*M. A. Rubin* (Worcester State Hospital).

1225. Trurnit, H. J. Weitere Untersuchungen über die Wärmebildung des Kaltblüterrückenmarkes. II. Die Wärmebildung bei reflektorischer Erregung und die Verteilung der Wärmebildung auf

die einzelnen Rückenmarksabschnitte. (Further investigations concerning heat production in the spinal cords of cold-blooded animals. II. Heat production in reflex excitation and the distribution of the heat production in the individual segments of the cord.) *Z. Biol.*, 1938, 99, 108-114.—The cord of the frog shows heat production following acid stimulation which resembles that following electrical excitation of the nerves. In stimulation of the nerve to the leg, the production of heat is greatest in the caudal portion of the cord. In direct electrical stimulation of the three "organ segments" the heat production is likewise greatest in the caudal portion.—*P. L. Krieger* (Leipzig).

1226. Trurnit, H. J. Weitere Untersuchungen über die Wärmebildung des Kaltblüterrückenmarkes. III. Die Komponenten der Wärmebildung. Erregung und Reizung. (Further investigations concerning heat production in the spinal cords of cold-blooded animals. III. The components of heat production. Excitation and stimulation.) *Z. Biol.*, 1938, 99, 115-131.—Examination of the time-heat curves (strength of nerve stimulation constant, duration varied) gives us a picture of the course of the excitation processes in the ganglion cells. The time relationships are discussed, and the fact is noted that the increase in heat depends upon the frequency of stimulation. An analysis of the curves supports the original contention of Winterstein, that the direct flow in nervous tissue produces (or strengthens) some process which has nothing to do with excitation in the true sense. But his interpretation with regard to the metabolism of excitation is questioned.—*P. L. Krieger* (Leipzig).

1227. Trurnit, H. J. Weitere Untersuchungen über die Wärmebildung des Kaltblüterrückenmarkes. IV. Das einseitige Überwiegen der gebildeten Wärme. (Further investigations concerning heat production in the spinal cords of cold-blooded animals. IV. Unilateral heat production.) *Z. Biol.*, 1938, 99, 132-140.—In preparations with only the right leg intact, more heat is produced with nerve stimulation on the right side than on the left. In curarized preparations and in those in which the nerves from the leg are severed the difference is less noticeable. When both sides are stimulated a mutual inhibition is at first evident, which subsides gradually after the first second; this effect is stronger on the side with the intact appendage. The secondary paralyzing action of curare on the frog's spinal cord, observed by earlier writers, manifests itself in this experiment as an impaired ability to generate heat.—*P. L. Krieger* (Leipzig).

1228. Walker, A. E., & Fulton, J. F. The thalamus of the chimpanzee. *Brain*, 1938, 61, 250-268.—The normal structure and histology of the medial and lateral geniculate bodies of the chimpanzee are described in detail. The degenerations in the lateral geniculate body of two chimpanzees resulting from lesions of the striate cortex and visual radiation are described, and the projection of the lateral geniculate body upon the cerebral cortex is analyzed.



The degenerations in the medial geniculate body are described in two experiments following temporal lobe lesions. The observations indicate that the auditory projection area of the chimpanzee is probably sharply restricted, as in the monkey, to a small area on the superior surface of the first temporal convolution, largely hidden within the Sylvian fissure. The spatial organization of the projection is not yet determined.—*W. Marshall* (Appleton Clinic, Wis.).

1229. Wessel, N. Y., & Carmichael, L. Certain effects of auditory stimulation on human brain potentials. *Psychol. Bull.*, 1938, 35, 688.—Abstract.—*A. W. Melton* (Missouri).

[See also abstracts 1233, 1252, 1278, 1285, 1355, 1359, 1362, 1380, 1391, 1491.]

# RECEPTIVE AND PERCEPTUAL PROCESSES

1230. Ansbacher, H. Further investigation of the Harold C. Brown shrinkage phenomenon; a new approach to the study of the perception of movement. *Psychol. Bull.*, 1938, 35, 701.—Abstract.—*A. W. Melton* (Missouri).

1231. Bassin, R., & Skerlj, B. Augenfehler und Augenfarbe. (Eye defects and eye color.) *Klin. Mbl. Augenheilk.*, 1937, 98, 314-321.—Study of 2848 boys and 1964 girls showed that moderate and serious errors of refraction are more frequent in light-colored eyes, and slight errors in dark eyes.—*P. L. Krieger* (Leipzig).

1232. Benning, D. B. Nursery schools for the deaf. *Amer. Ann. Deaf*, 1938, 83, 417-424.—The author presents arguments for nursery schools for deaf children and suggests details as to type of building needed, the school staff, the living routine for the children, and school curriculum. Such schools will of necessity be a part of larger residential schools, but must be an independent unit.—*C. V. Hudgins* (Clarke School).

1233. Benoit, J. Rôle des yeux et de la voie nerveuse oculo-hypophysaire dans la gonadostimulation par la lumière artificielle chez le canard domestique. (The role of the eyes and the oculo-hypophyseal nervous pathway in gonadal stimulation by artificial light in the domestic duck.) *C. R. Soc. Biol., Paris*, 1938, 129, 231-234.—The author concludes that light exercises a stimulating action on the hypophysis through a simultaneous excitation of different points of the autonomic nervous system, which links the retina with the hypophysis. He does not exclude the possibility, however, that the hypophysis itself may be directly excited by light rays. These observations are a further indication of the influence of artificial light on the development of the genital glands in the duck in the prepubertal stages.—*G. Goldman* (Sorbonne).

1234. Breitstein, M. L., & Whildin, O. The proper criteria for lip reading recommendation: medical and educational considerations. *Sth. med. J.*, 1937, 30, 924.—When examinations and hearing

tests have established a diagnosis of permanent or progressive deafness, the child's need for lip reading can be determined after answering certain questions: (1) Is the deafness monaural or binaural? (2) Does the loss of hearing lie in the range of speech? (3) Is the patient working up to the level of his ability in school? (4) Is he happily adjusted in his class, socially and physically? (5) Is his behavior natural and acceptable? (6) Is there any indication of deafness in his speech? Follow-up and retesting are of great importance in each case. In certain cases treatment, either local or operative, which might improve local aural conditions will likewise offer possibilities in improved hearing.—*J. Robertson* (Brown).

1235. Bronstein, A., & Tschurilowa, E. [The dependence of the recovery time of the original excitability of the auditory apparatus upon the pitch of the stimulating tone.] *Fiziol. Zh. U.S.S.R.*, 1936, 21, 557-562.—This experiment attempts to answer the question whether tones of equal intensity but different pitch effect similar modifications in the auditory apparatus. This was done by presenting pure tones of 100, 800, 2000, 3000 and 4000 cycles in the course of 2 minutes, and measuring the recovery time of the original excitability. All tones had an intensity of 94 decibels. The results indicate that this recovery time depends on the pitch of the tone, since it increased measurably for tones of 2000 cycles and above. Individual differences also increased with increased frequencies. There was no indication of any direct relationship between the original excitability of the auditory apparatus and its facility of recovery. It follows that pitch as well as intensity should be considered in determining the effect of sound on the ear.—*P. L. Krieger* (Leipzig).

1236. Brown, R. R., & Vogel, V. H. Psychophysiological reactions following painful stimuli under hypnotic analgesia contrasted with gas anesthesia and novocain block. *J. appl. Psychol.*, 1938, 22, 408-420.—Three subjects selected for depth of analgesic effects underwent a series of experiments in which they were subjected to pain stimuli under conditions of hypnotic analgesia, local block, and gas anesthesia. Physiological reactions of blood pressure, pulse rate, skin potential, and respiratory changes were secured and recorded. The stimuli used were sharp pain, inflicted by a blood lancet, continuous pain from pressure with a thumb tack, hot water (49° C.), and indifferent stimuli. It is concluded that physiological reactions to sensory stimuli are not abolished by suggested hypnotic analgesia, that they can be affected by suggestion in the hypnotic state and by imagination in the normal state, that gas anesthesia abolishes physiological reactions to moderately intense stimuli, and that external reactions associated with pain may be abolished by hypnotic analgesia, by imagining analgesia in the normal waking state, by local block, and by gas anesthesia.—*S. Roslow* (Psychological Corporation).

1237. Bugg, E. G. A binocular color phenomenon. *Amer. J. Psychol.*, 1938, 51, 769-770.—A description of the after-images obtained from Hecht's binocular color mixer, in which R and G stimulate the R and L eyes, respectively, in such a way as to produce a fused field (Y) in the middle, flanked by pure R and pure G. The after-effects described are V in the middle, flanked by BG and P on the R and L. This is interpreted as indicating that either the V after-image is the result of the binocularly-fused Y stimulus, or the result of the fusion of the after-images of the R and G. The latter is thought the more probable explanation.—D. E. Johannsen (Skidmore).

1238. Critchley, M. "Aphasia" in a partial deaf-mute. *Brain*, 1938, 61, 163-169.—In the case of the deaf-mute patient described in this paper, the "natural" sign-language was not impaired. The circumstances were unusual, however, in that he had never been proficient in this means of communication, and preferred lip-reading or finger-spelling. This may be ascribed to a variety of reasons, and especially to the fact that hearing was intact for the first few years of life, during which period articulate speech developed normally. For this reason the patient cannot be regarded as an example of "complete" or congenital deaf-mutism.—W. Marshall (Appleton Clinic. Wis.).

1239. Dearborn, W. F., & Anderson, I. H. Aniseikonia as related to disability in reading. *J. exp. Psychol.*, 1938, 23, 559-577.—Analysis of the records of examinations for aniseikonia of 100 cases of severe disability in reading and of 100 control cases showed the following: (1) 51% of the experimental cases and 23% of the control cases had clinically significant amounts of aniseikonia. The difference between these percentages is 4.31 times its standard error. (2) Of the cases in both groups with significant amounts of aniseikonia, those in the experimental group had amounts ranging from 1.00 to 7.00%, with an average of 2.08%; whereas those in the control group had amounts ranging from 1.00 to 2.75%, with an average of 1.49%. The difference between these averages is 3.10 times its standard error. Of the 68 paired cases in each group on whom aniseikonic data were available at both distances, 56% of the experimental cases and 22% of the control cases had significant amounts at reading distance, while at 20 ft. 40% of the former and 24% of the latter had these amounts. The ratio of the difference between these percentages to the  $\sigma_{diff}$  is 4.36 at the near point and 2.03 at the far point. It is concluded that aniseikonia is one of the many factors that may contribute to the causation and persistence of disability in reading.—H. W. Karn (Pittsburgh).

1240. Duke-Elder, S. Practice of refraction. (3rd ed.) Philadelphia: Blakiston's, 1938. Pp. 371. \$4.50.—R. R. Willoughby (Brown).

1241. Engelmann, C. Vom Geschmackssinn des Huhns. (The gustatory sense of the fowl.) *Forsch.*

*Fortschr. deutsch. Wiss.*, 1937, 13, 425-426.—P. L. Krieger (Leipzig).

1242. Erisman, T. Wahrnehmungslehre und Scheinbewegung. I. Wesen und Entstehung der Scheinbewegung, betrachtet und erklärt im Lichte einer Wahrnehmungstheorie. (A theory of perception and apparent movement. I. The nature and emergence of apparent movement, considered and explained in the light of a theory of perception.) *Arch. ges. Psychol.*, 1938, 100, 305-386.—The author presents an extended phenomenological discussion of the nature of real and apparent movement and the requisite conditions for the perception of each. Thing-perception (*Ding-sehen*) is taken to lie at the basis of all apparent movement perception.—G. F. J. Lehner (Vermont).

1243. Federley, H. Antropogenetiken som medicinsk disciplin. (Human genetics as a medical discipline.) *Svenska Läkartidn.*, 1938, 35, 1615-1623.—A survey is given of recent work in the field, with special reference to color blindness. The female has two X-chromosomes while the male has only one. The color-blindness gene and the sex gene are localized in the X-chromosome; this occurs in all eggs in the female but only in half of the cells in the male, which always produce females. A son thus gets his only X-chromosome from his mother. If this contains a recessive gene, it will appear in the phenotype of the son, while in the son the dominant gene is lacking which in the mother hindered the recessive gene from manifesting itself. If, however, a daughter receives an X-chromosome with such a disposition from her father, then it will not appear in her phenotype because she has received from her mother a normal X-chromosome with the dominant gene. That the son of a color-blind father has normal color vision and begets only normal children is then due to the fact that a son never can receive his father's X-chromosome. Thus the heterozygotic woman transmits color blindness to those of her sons who get the X-chromosome and to those of her daughters who become conductors.—M. L. Reymert (Mooseheart Laboratory for Child Research).

1244. Ferree, C. E., & Rand, G. Prescribing light. An important factor in the care and treatment of the eye. *Brit. J. Ophthalm.*, 1938, 22, 641-669.—The authors discuss: the outstanding features in lighting in relation to the examination and care of the eye; means for improving lighting conditions; tests for the preferred intensity of light, for susceptibility to glare, and for the need of correction for color; and the intensity of light and the strength of reading glasses.—R. J. Beitel, Jr. (American Optical Company).

1245. Fish, A. G. Laura Bridgman: first deaf-blind child to learn the use of language. *Amer. Ann. Deaf*, 1937, 82, 402-405.—A brief account of the entrance and early training of Laura Bridgman at Perkins Institute for the Blind.—C. V. Hudgins (Clarke School).

1246. Freiberg, D. Artefakte der Haut unter besondere Berücksichtigung der psychischen Per-

sönlichkeit und des Lebensschicksals der Träger. (Artifacts of the skin, with special reference to the psychic personality and the life destiny of the subject.) Breslau: Bresl. Genossenschafts-Buchdr., 1938. Pp. 38.—R. R. Willoughby (Brown).

1247. Gilbert, G. M. *The experimental psychology of vision.* (Film.) New York: Columbia Univ., 1938. 450 ft. 16 mm. \$30.00.—Designed as an introduction to the chief phenomena and techniques of research in visual perception for classes in general or experimental psychology. The subjects are treated in such a way as to show their relationship to daily experience. The subdivisions may be shown independently for demonstration or in sequence for review. Includes the phi phenomenon, flicker fusion, optical illusions, color constancy, eye movements in reading, and perception span, ending with an actual experiment in digit span.—C. J. Warden (Columbia).

1248. Gilbert, G. M. *Color vision.* (Film.) New York: Columbia Univ., 1938. 150 ft. (in color). 16 mm. \$22.00.—May be used independently or as a supplement to the above film. Includes color mixture, color blindness, retinal perimetry, and after-images, illustrated with charts and animated diagrams.—C. J. Warden (Columbia).

1249. Gilbert, G. M. *A study in inter-sensory Gestalten.* *Psychol. Bull.*, 1938, 35, 698.—Abstract.—A. W. Melton (Missouri).

1250. Girden, E. *Cerebral mechanisms and auditory localization in dogs.* *Psychol. Bull.*, 1938, 35, 699-700.—Abstract.—A. W. Melton (Missouri).

1251. Goodfellow, L. D. *The effect of patterns on psychophysical judgments.* *Psychol. Bull.*, 1938, 35, 627.—Abstract.—A. W. Melton (Missouri).

1252. Harlow, H. F. *Recovery of pattern discrimination in monkeys following occipital lobe lesions.* *Psychol. Bull.*, 1938, 35, 686-687.—Abstract.—A. W. Melton (Missouri).

1253. Heider, F. *Report of the Clarence W. Barron Research Department; psychological division.* *A. R. Clarke Sch. Deaf*, 1938, No. 71, 23-27.—A summary of six research problems: (1) Comparison of themes showed that the hearing children used more temporal, relative, place, and "if" clauses; the deaf children employed more "that" clauses and causal clauses. In general, the deaf used a simpler style, involving shorter, more rigid language units. (2) Study of reading habits indicated that the language handicap produces a retardation of reading interest in the deaf. (3) Free associations of deaf children differed from those of normals. It would seem that the test responses "are influenced by superficial habits of language and are probably largely dependent on educational method." (4) Comparison of the vocabularies of the deaf and the hearing showed that there is an actual divergence, and not mere retardation of the deaf. (5) Special training in vowel recognition had little effect on lip-reading ability of older children. (6) Preliminary test work showed that correct use of articles and

pronouns improves little with increasing chronological and educational age. Children with partial hearing scored much higher than profoundly deaf children, even of the same educational age.—F. W. Finger (Brown).

1254. Helson, H. *Fundamental problems in color vision. I. The principle governing changes in hue, saturation, and lightness of non-selective samples in chromatic illumination.* *J. exp. Psychol.*, 1938, 23, 439-476.—"Non-selective samples in chromatic illumination have been shown to exhibit the color of the illuminant, the color of the after-image complementary to the illuminant, or achromaticity, depending upon the relation of the reflectance of the sample to the adaptation reflectance. Change of background has been found sufficient to shift the color of a sample from the illuminant color to achromaticity or to the complementary color. . . . Constancy is found either when the illuminant is not sufficiently homogeneous for conversion or when a sample and adaptation reflectances happen to coincide. Quantitative determinations of the extent of constancy and the beginnings of conversion are reported for the first time. Theories which assign more or less independence to object as against illuminant color, which separate constancy, contrast, adaptation, and conversion, and which ascribe different behavior with respect to these mechanisms to film and surface modes of viewing, are shown to be based upon one-sided conditions under which the observations were made supporting them. A single principle has been found adequate to explain and predict how object colors change with change in illumination and background."—H. W. Karn (Pittsburgh).

1255. Helson, H. *Color constancy, conversion, contrast and adaptation.* *Psychol. Bull.*, 1938, 35, 672-673.—Abstract.—A. W. Melton (Missouri).

1256. Heyn, W. *Untersuchungen zum Lichtsinn der Albinos.* (Investigations of the light sense of albinos.) Ochsenfurt a. M.: Fritz & Rappert, 1938. Pp. 27.—R. R. Willoughby (Brown).

1257. Hoffmann-Rötzel, F. W. *Die Erythropsie der Aphaken.* (Erythropsia in cases of aphakia.) *Z. Augenheilk.*, 1938, 95, 323-333.—Erythropsia in cases of aphakia is not elicited by excessive light intensity, but has predominantly physical causes. It may be explained only by dispersion of the light rays, making it a form of achromatism. This occurs in the long-wave range of the spectrum and is sensed as red.—P. L. Krieger (Leipzig).

1258. Hollingworth, H. L. *Perceptual fluctuation as a fatigue index.* *Psychol. Bull.*, 1938, 35, 628.—Abstract.—A. W. Melton (Missouri).

1259. Holway, A. H., Golding, L. E., & Zigler, M. J. *On the discrimination of minimal differences in weight: IV. Kinesthetic adaptation for exposure intensity as variant.* *J. exp. Psychol.*, 1938, 23, 536-544.—Immediately following exposure ( $= W \times t$ ), kinesthetic differential sensitivity ( $= 1/\Delta W$ ) was measured for specified conditions as a function of



post-exposure time. Exposure intensities were 500, 1200 and 4000 grams; the exposure time was constant (60 sec.). Measurements were made by the method of limits for a standard weight of 200 grams. Three main facts were established by the measurements. For each of two practiced observers, differential sensitivity as a function of post-exposure time was found to increase continuously until it approximated its normal value. At any given moment during the recovery interval, differential sensitivity varied inversely with the exposure intensity. The duration of the total recovery period varied directly with the exposure intensity. On the basis of the principle of neural availability and the constant quantity hypothesis, it is shown that these facts can be accounted for simply in terms which are wholly consistent with experimentally established neurophysiological fact.—H. W. Karn (Pittsburgh).

1260. Holway, A. H., & Hurvich, L. M. Visual differential sensitivity and retinal area. *Amer. J. Psychol.*, 1938, 51, 687-694.—"The relationship between differential sensitivity ( $= I/\Delta I$ ) and the size of the retinal image has been experimentally determined at 10 levels of illumination for two O's. In general,  $I/\Delta I$  was found to vary directly with the size of the retinal image, and to vary inversely with the illumination. These results can not consistently be accounted for simply in terms of retinal or neural excitation. For a retinal image of 'constant' size,  $\Delta I$  increases with illumination and thus with an increase in excitation; for a constant level of illumination, on the other hand,  $\Delta I$  decreases with an increase in the size of the retinal image, and thus varies inversely with the resulting excitation. The data can, however, be subsumed under a single dynamically conceived, explanatory principle: differential sensitivity varies directly with the total excitation potentially available for the discrimination of a just noticeable difference in brightness. This theory is fully coherent with the established facts concerning the activities of individual nerve fibres."—D. E. Johannsen (Skidmore).

1261. Hopkins, L. A. Report of the Clarence W. W. Barron Research Department; concerning heredity of deafness. *A. R. Clarke Sch. Deaf*, 1938, No. 71, 29-35.—Most of the work reported under this title concerns the relationship between type of audiogram and the ability to interpret speech sounds. Within each of three groups (normal, one ear normal and one subnormal for high and low frequencies, both ears subnormal for high and low frequencies) vowel errors were approximately as frequent as consonant errors. However, within the fourth group (normal up to 1024 or 2048 c.p.s., and subnormal at higher frequencies, in both ears), the consonant error score was more than three times the vowel error score.—F. W. Finger (Brown).

1262. Hubbell, M. B. Naïve subjects' attempts to produce 'good' configurations. *Psychol. Bull.*, 1938, 35, 698-699.—Abstract.—A. W. Melton (Missouri).

1263. Irmak, S. Über die Sehscharfe der Nomaden in Kleinasien. (The visual acuity of the nomads of Asia Minor.) *Dtsch. med. Wschr.*, 1938, 64, 677-678.—Of peoples hitherto studied, the nomads of Asia Minor have the finest visual acuity. In one case ninefold acuity was determined, and even in old age two- and threefold acuity. The finest acuity appeared in the male sex at ages from 10 to 38. In females the decline in acuity seems to begin earlier than in males. Persons having unusual acuity appear generally to surpass others physically and intellectually. In the subjects studied, binocular acuity surpassed monocular. Fine visual acuities seem to indicate an hereditary dominance. The nomads suppose that their acuity depends on eating meat.—P. L. Krieger (Leipzig).

1264. Lempp, O. Über Diplakusis und musikalisches Falschhören. (Diplacusis and musical mishearing.) *Hals- Nas- u. Ohrenarzt*, 1938, 46, 193-255.—R. R. Willoughby (Brown).

1265. Lewis, D. Psychophysical approaches to the analysis of timbre. *Psychol. Bull.*, 1938, 35, 673.—Abstract.—A. W. Melton (Missouri).

1266. Lloyd, L. S. Decibels and phons; a musical analogy. New York: Oxford Univ. Press, 1938. Pp. 19. \$0.50.—The author uses a musical analogy to explain the uses of these two terms to musicians who are untrained in physics.—E. H. Kemp (Brown).

1267. Maass, H. Über den Einfluss akustischer Rhythmen auf optische Bewegungsgestaltungen. (Concerning the influence of acoustic rhythms upon visually perceived movement.) *Arch. ges. Psychol.*, 1938, 100, 424-464.—12 subjects (who provided a total of 2325 readings) were presented with stroboscopic movements by means of several lights. Observations of movement were made under three different conditions: (1) without accompanying acoustical stimuli, (2) with a "3-accent" acoustic stimulus, and (3) with a "2-accent" acoustic stimulus. Results show that although objective conditions remained unaltered, the addition of an acoustic rhythm markedly affected stroboscopic perception. Only 3.1% of the forms as perceived without acoustic rhythm remained unchanged when rhythm was added. In general, acoustic stimuli decreased the number of movement patterns seen. Acoustic accentuation resulted in increased brightness of the lights and often a crowding together of the lights on the accented beat. Acoustic patterns tended to impress their characteristics on visual patterns.—G. F. J. Lehner (Vermont).

1268. Meyer, M. F. What retards speech teaching to the deaf parvel? *Amer. Ann. Deaf*, 1938, 83, 153-168.—The young deaf child must depend upon his eyes in the learning of speech; the visual centers are immature and cannot be used as the normal child uses his auditory centers in learning speech. Another reason given is the lack of social motivation. The child will not learn to talk because there is no motive for the large amount of practice necessary for the development of speech. For the same reasons

reading and writing are delayed in deaf children, as well as in normal children until the 5th or 6th year. The author gives the educational record of a single deaf girl from the age of 40 months to the seventh year to support his theories.—C. V. Hudgins (Clarke School).

1269. Nafe, J. P. Dr. W. L. Jenkins on the vascular theory of warmth and cold. *Amer. J. Psychol.*, 1938, 51, 763-769.—A point-by-point rebuttal of Jenkins's criticisms of Nafe's vascular theory of temperature sensitivity (*Amer. J. Psychol.*, 1938, 51, 424-429).—D. E. Johannsen (Skidmore).

1270. Nasiell, V. Om hörselskador hos larmarbetare och deras förebyggande. (Concerning hearing difficulties in workers in noisy places and how to prevent them.) *Soc.-med. Tidskr.*, 1938, 15, 234-237.—This is a lecture to the Swedish Metal Workers' Union, setting forth first the general physiology and psychology of hearing, next the different kinds of working groups who are apt to have hearing damaged. Out of 359 copper workers with damaged hearing, inner-ear damage was present in 82.7%, with other kinds of ailments in 17.3%. Concerning laws, so far only Germany and Russia offer compensation for hearing damaged in work shops. 7 rules of prophylaxis are presented.—M. L. Reymert (Mooseheart Laboratory for Child Research).

1271. Newhall, S. M. The colors of the positive after-images following momentary chromatic stimulation. *Psychol. Bull.*, 1938, 35, 674.—Abstract.—A. W. Melton (Missouri).

1272. Niemand, H. G. Ist der Individualgeruch für den Hund richtungsgebend zum Erkennen seines Herrn? (Is individual odor sufficient to direct a dog in recognizing his master? Leipzig: Gebr. Gerhardt, 1938. Pp. 61.—R. R. Willoughby (Brown).

1273. Paterson, D. G., & Tinker, M. A. The part-whole proportion illusion in printing. *J. appl. Psychol.*, 1938, 22, 421-425.—A survey of 400 books revealed that the median book devoted 52.8% of the page to print. The most frequent estimate given by 928 college students was 75%. This illusion was investigated experimentally by using a series of cards of three sizes in which the margins were white and the center merely black, or vice versa, with no printed text at all. Three groups of 100 college students each estimated the proportion of the cards occupied by the centers. These groups also overestimated the proportion of the center to the whole by about 18%.—S. Roslow (Psychological Corporation).

1274. Peters, G. A. Appraisal of visual defects of children in Indiana. *Ind. St. med. Ass. J.*, 1938, 31, 237-274.—J. Robertson (Brown).

1275. Pierce, G. W., & Griffin, D. R. Experimental determination of supersonic notes emitted by bats. *J. Mammal.*, 1938, 19, 454-455.—Beats were produced by putting supersonic waves into a microphone and leading them into a loud-speaker along

with a constant high frequency alternating current. Thus it was possible to detect the presence of supersonic waves. When disturbed, or at the beginning of a short flight, bats of two genera (*Myotis lucifugus* and *Eptesicus fuscus fuscus*) produced notes of about 48,000 cycles. The sounds were made by the mouth or larynx. No evidence could be secured as to whether the bats were able to hear these high frequency sounds.—C. N. Cofer (Brown).

1276. Pintner, R. Ever-widening fields of research. *Amer. Ann. Deaf*, 1938, 83, 225-234.—The author discusses the various lines of research in which he has been interested dealing with handicapped children, and outlines a program of research for future work in this field. Seven basic problems involving the deaf and hard of hearing, seven problems dealing with bilingualism, and two problems involving other physically handicapped children are listed. A list of 15 references is given.—C. V. Hudgins (Clarke School).

1277. Powell, E. [Ed.] Smoking and its effect upon visual accommodation. *Res. Quart. Amer. Ass. Hlth phys. Educ. (Suppl.)*, 1938, 9, No. 1, 30-36.—This is a summary of theses by J. Couch, L. Schutz, C. L. Newbury, J. B. Rinaldo, S. L. Houston, R. Stevenson, J. M. Homewood, and M. M. Yost, all of Wellesley College. "In general smoking first excites and then powerfully depresses the central and peripheral nervous systems, in smokers and non-smokers alike." In particular, smoking speeds up the total process of visual accommodation; rest causes this same result, but to a lesser extent; occasional smokers are more affected than are habitual smokers.—F. W. Finger (Brown).

1278. Rawdon-Smith, A. F., Carmichael, L., & Wellman, B. Electrical responses from the cochlea of the fetal guinea pig. *J. exp. Psychol.*, 1938, 23, 531-535.—In a 52-day (post-insemination) fetus a small response (1-2 $\mu$ v peak) was obtained to a stimulus of frequency 600 c.p.s. and intensity 100 db. above the human threshold at the animal's ear. Declining responses were obtained to tones below this, and to tones above 2000 c.p.s. This fetus also reacted overtly to auditory stimuli. The greatest electrical response photographically recorded amounted to 100 $\mu$ v peak, from a fetus of 62 p.i. days of age, though responses in excess of this were observed. This animal also showed "startle" responses to intense stimuli. Though all of these electrical responses appear small in comparison with those obtainable from the adult animal, this is ascribed, in the first place, to the fact that the external auditory canal in the fetus is not unobstructed, and in consequence the stimulus is attenuated before reaching the cochlea. In the second place, the fact that the younger fetus gave a smaller response than the older one indicates a progressive development of the auditory mechanism.—H. W. Karn (Pittsburgh).

1279. Ross, R. T. Fusion frequency and the light-dark ratio. *Psychol. Bull.*, 1938, 35, 701.—Abstract.—A. W. Melton (Missouri).

1280. Ryan, T. A. Geographical orientation. *Psychol. Bull.*, 1938, 35, 626-627.—Abstract.—A. W. Melton (Missouri).
1281. Schaefer, V. G., & Gilliland, A. R. The relation of time estimation to certain physiological changes. *J. exp. Psychol.*, 1938, 23, 545-552.—This study is an attempt to locate a physical basis for the estimation of short time intervals. The physiological processes selected for study were (1) pulse rate, (2) heart work, (3) breathing rate, (4) breathing work, and (5) blood pressure changes. Subjects were given time intervals from 4 to 27 seconds to estimate. Analysis of the findings revealed no definite relationship between the estimation of short time intervals and the five physiological conditions studied.—H. W. Karn (Pittsburgh).
1282. Schmidt, E. Untersuchungen über die Vererbung der Rezeptorstärke an Familien. (Investigations on the inheritance of the strength of receptors in families.) Halle: Klinz, 1938. Pp. 19.—R. R. Willoughby (Brown).
1283. Schmidt, H. Untersuchungen mit den Podestischen Wandtafeln zur Prüfung des Farbensinnes und Erkennung der Farbenuntüchtigkeit. (Investigations with the Podestá wall charts for testing the color sense and recognizing color deficiency.) Halle: Ostdt. Druckerei u. Verl. Anst., 1938. Pp. 31.—R. R. Willoughby (Brown).
1284. Schulz, F. Bau und Funktion der Sinneszellen in der Körperoberfläche von *Helix pomatia*. (The structure and function of sensory cells in the body surface of *Helix pomatia*.) *Z. Morph. Ökol. Tiere*, 1938, 33, 555-581.—*Helix pomatia* is capable of perceiving light through the eyes as well as through its small tentacle. In addition, its skin is sensitive to light, receptors for which are distributed over the entire body surface. Furthermore, its skin contains receptors for chemical, pressure, and temperature stimuli. Its olfactory reactions depend upon atmospheric conditions, while its sensitivity to pressure is especially well developed in the feet and the front part of the head. Its tentacles are especially sensitive to heat.—P. L. Krieger (Leipzig).
1285. Smith, K. U. The neural centers concerned in the mediation of apparent movement vision. *Psychol. Bull.*, 1938, 35, 685.—Abstract.—A. W. Melton (Missouri).
1286. Streng, A., & Kirk, S. A. The social competence of deaf and hard-of-hearing children in a public day school. *Amer. Ann. Deaf*, 1938, 83, 244-254.—97 deaf and hard-of-hearing children between the ages of 6 and 18 years were given two intelligence tests (Arthur performance scale and Chicago non-verbal examination) and one social maturity scale (Vineland). Results showed that the subjects were normal in both intelligence and social maturity. There is a correlation of .29 between intelligence and social maturity. No significant differences were found between the deaf and the hard-of-hearing groups in either of the tests; sex differences were also insignificant. The age of onset of deafness does not affect the SQ. The discrepancy between these results and those obtained from other deaf groups may be explained by either of the following considerations: The deaf children previously studied were inferior in intelligence as well as in social maturity, or deaf children in day schools are superior to those in residential schools in social competence.—C. V. Hudgins (Clarke School).
1287. Suchman, E. A., & Weld, H. P. Minor studies from the Psychological Laboratory of Cornell University. LXXXVII. The effect of light-flashes during the course of dark adaptation. *Amer. J. Psychol.*, 1938, 51, 717-726.—"In this study we sought to determine the effect of flashes of various intensities and of various durations upon the normal course of dark adaptation. The results . . . (1) Loss of sensitivity as a result of exposure to a flash during the course of dark adaptation is a direct function of the intensity and duration of the flash. There appears to be a reciprocal relationship between the duration and intensity of the flash as far as the momentary decrease in sensitivity is concerned. (2) The duration and rate of return to the former state of sensitivity is a direct function of the duration of the flash alone. (3) For long durations the initial rise in threshold is very rapid immediately following the flash, and the decline in threshold occurs gradually. . . . (4) Flashes of light for all intensities and durations . . . do not alter the subsequent course of dark adaptation. (5) The dark-adaptation curve has the same shape for all O's. . . . (6) Flashes of short duration at all intensities above the threshold resulted in positive after-images. Flashes of long duration result in after-sensations which are probably negative after-images."—D. E. Johannsen (Skidmore).
1288. Wallach, H. On sound localization. *Psychol. Bull.*, 1938, 35, 699.—Abstract.—A. W. Melton (Missouri).
1289. Walton, W. E. Techniques of measuring hue discrimination of lower mammals. *Psychol. Bull.*, 1938, 35, 628.—Abstract.—A. W. Melton (Missouri).
1290. Weil, A. Die optischen Wahrnehmungsphänomene in der Hypoglykämie. (Visual perceptual phenomena in hypoglycemia.) *Msschr. Psychiat. Neurol.*, 1938, 100, 98-127.—The author reports visual disturbances in insulin poisoning. These are manifested by a general lowering of acuity, rigidity of fixation, double images, through perception of size and depth, color vision, color discrimination, and perception of movement. In an investigation made upon himself the author observed entoptic phenomena and pseudo-hallucinations which corresponded partly to childhood recollections and partly to wish fantasies. The frequent bordering of hypoglycemic phenomena on archaic and primitive visual responses was striking.—P. L. Krieger (Leipzig).
1291. Weinand, W. Über die diagnostische Bedeutung der Verstärker audiogramme. (The diag-



nostic significance of amplified audiograms.) *Arch. Ohr.- Nas.- u. KehlkHeilk.*, 1938, 144, 384-394.—The amplified audiograms of 103 sufferers from advanced deafness were studied for their diagnostic significance. As contrasted with the basic curve, the amplified curve has the advantage that even in extreme deafness, where a typical audiogram cannot be obtained with an intensity of 70 phons, displacement proportional to the degree of deafness up to 130 phons (pain threshold) may produce typical audiograms with amplification of optimal hearing in the two kinds of deafness ( $c^4$  for disturbance of conduction,  $c^2$  for deafness of the inner ear), through temporary enlargement or restriction of the limits of hearing. The result is more clear-cut for deafness of the inner ear than for disturbance of conduction. In cases of monaural deafness with considerable difference in hearing capacity on the two sides, or with extreme disturbance of conduction, a displacement of optimal hearing to  $c^4$  cannot be established despite extreme increase in intensity. On the other hand the amplified curve and likewise the basic curve may here become more distinct in cases of extreme deafness where a negative trickle (*Rinne*) is "felt."—*P. L. Krieger* (Leipzig).

1292. **Werner, C. F.** *Funktionelle und vergleichende Anatomie der Otolithenapparate bei den Vögeln.* (Functional and comparative anatomy of the otolith mechanisms in birds.) *Z. Anat.*, 1938, 108, 775-791.—The membranous wall of the labyrinth, the sensory epithelium with its neural connections, the bordering epithelia, and the otolithic membranes are closely interrelated and form an elaborate mechanism with definite local distinctions. The morphological peculiarities may be explained partly by mechanical displacement due to the cramped space (in smaller birds), and are in part related to the hypothetical function. The 3 otoliths probably have a quite different functional significance. The special formation of the anterior and lateral walls of the macula utriculi probably plays the same part in static reflexes that has been assigned for fish and mammals on the basis of similar relationships. The macula sacculi, whose surface is in no wise vertically related to the macula utriculi, is perhaps concerned with regulating the production and pressure of fluid in the labyrinth. The function of the laguna is related to spatial position; it has some bearing upon the hypothetical sense of locality.—*P. L. Krieger* (Leipzig).

1293. **Woodring, P.** *Direction orientation in human adults.* *Psychol. Bull.*, 1938, 35, 627.—Abstract.—*A. W. Melton* (Missouri).

1294. **Xéridat, M.** *L'institution nationale des sourds-muets de Paris. Aperçu historique.* (The national institute for deaf-mutes in Paris. Historical sketch.) *Rev. méd.-soc. Enfance*, 1937, 5, 110-114.—The first free school for deaf-mute instruction was founded by the Abbé de l'Épée in 1760. Since that time the school has developed progressively and has become a school for the preparation of teachers. Among the important additions to the

school were an otological clinic in 1822 and a laboratory for the study of experimental phonetics in 1912. At present the cinema furnishes one of the best methods for instruction.—*G. Goldman* (Sorbonne).

1295. **Zanger, G.** *L'enfant et le poison.* (The child and poison.) Paris: Alcan, 1938. Pp. 132. 20 fr.—A study of sensory psychology in children, covering color preferences, olfactory sensitivity, etc.—*G. Goldman* (Sorbonne).

[See also abstracts 1194, 1208, 1214, 1217, 1223, 1229, 1250, 1303, 1307, 1322, 1326, 1374, 1495, 1497, 1582, 1608, 1612, 1673, 1689, 1690.]

## LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

1296. **Blair, G. M.** *Relation of intelligence to knowledge of world affairs.* *Sch. & Soc.*, 1938, 48, 762-763.—The students in junior and senior high schools in Everett, Washington, were given group intelligence tests and a current events test. Those who were in the upper 15% in the intelligence tests were 20.27 points higher in the current events test than the lowest 15%. Gifted junior high school pupils did better than non-gifted senior high school pupils. This difference in knowledge of world affairs is still true of bright and dull pupils if in the correlation the occupation of the fathers is held constant.—*M. Lee* (Chicago).

1297. **Brogden, W. J.** *The effect of frequency of reinforcement upon the level of conditioning.* *Psychol. Bull.*, 1938, 35, 635-636.—Abstract.—*A. W. Melton* (Missouri).

1298. **Bugelski, R., & Miller, N. E.** *A spatial gradient in the strength of avoidance responses.* *J. exp. Psychol.*, 1938, 23, 494-505.—30 albino rats were first given four training trials in which they ran away from a brief shock received at one end of a straight alley. Then, in test trials without shock, they were placed in the alley at various distances from that end and the pattern of their running away was recorded directly, in exact detail, on a polygraph. When placed in the alley farther from the original shock point, the animals tended to wait longer before starting to run away than they did when placed nearer to this point. Even after getting started, the animals placed farther from the shock point tended to run less rapidly than they did when placed nearer to this point. This evidence is relevant to theories of learning, as well as conflict, in that it tends to support the generalization that the effect of a reinforcing stimulus varies inversely as the remoteness of that stimulus from the act which is reinforced.—*H. W. Karn* (Pittsburgh).

1299. **Bunch, M. E.** *The efficiency of retention of a rational learning problem under (1) normal conditions and (2) conditions of interpolated learning, for long intervals of time.* *Psychol. Bull.*, 1938, 35, 691.—Abstract.—*A. W. Melton* (Missouri).

1300. Carlson, H. B., & Carr, H. A. Visual and vocal recognition memory. *J. exp. Psychol.*, 1938, 23, 523-530.—A series of visual recognition tests of words favoring the use of vision alone, vocality alone, and vision and vocality combined were given to 202 subjects. A considerable number of subjects were found to be consistently superior in one series, as contrasted with another. The explanation advanced is that these subjects differ in their ability to use visual, vocal, and visual-vocal cues. It follows then that some of the conflicting reports previously made comparing memory efficiency of the different senses may be due in part to differences in the abilities of the subjects comprising the groups involved.—H. W. Karn (Pittsburgh).

1301. Copeland, H. A. Age differences in mental ability as measured by a work-limit test. *Psychol. Bull.*, 1938, 35, 642-643.—Abstract.—A. W. Melton (Missouri).

1302. Erdmann, E. Elementy wypowiedzi własnej i cudzej, przedstawione graficznie. (Elements of one's own testimony and that of others, graphically represented.) *C. R. Soc. Sci. Varsovie*, 1936, 29, No. 2. Pp. 10.—R. R. Willoughby (Brown).

1303. Fischel, W. Affekt, Gedächtnis und Leistung bei Wirbeltieren. (Affect, memory, and performance of vertebrates.) *Z. Tierpsychol.*, 1938, 2, 198-220.—Spontaneous food preference diminishes with repeated presentation. Experiments with rats permitted their classification according to the number of "correct" choices. Animals capable of strong emotions showed considerable but infrequent affective fluctuations. The rats chose the preferred food from identical boxes covered with hinged lids, but ceased to do so when the box containing the non-preferred food was conspicuously marked. In this case the immediately perceptible goal appeared more effective than the hidden goal. Detour experiments with rats, sheep, and apes showed considerable individual differences. It seemed as if detours in one direction were made more reluctantly than in another. The affective tone rather than the difficulty of a task seems to determine the learning process. Sheep and apes learned more rapidly when the task was more complex (choice of 3 or 4 instead of 2 detours).—P. L. Krieger (Leipzig).

1304. Fitts, P. M., Jr. An experimental investigation of the relative influence of frequency and of motivation in animal learning. *Psychol. Bull.*, 1938, 35, 636-637.—Abstract.—A. W. Melton (Missouri).

1305. Gibson, E. J. Retroactive inhibition as a function of degree of generalization. *Psychol. Bull.*, 1938, 35, 625.—Abstract.—A. W. Melton (Missouri).

1306. Girden, E. Conditioning and problem-solving behavior. *Amer. J. Psychol.*, 1938, 51, 677-686.—Dogs were conditioned to flex the forepaw (US = electric shock) when a buzzer (or tone) was presented on the right side, but to inhibit the response when the sound came from the left. "The organization of the anticipatory body set and the

voluntary paw-flexion response is shown to be a function not of conditioning but of repeated application of shock alone. The rate of development of the paw flexion CR is a function of the amount of restraint, and the spatial and temporal properties of the stimuli used. Under proper conditions, 100% CR can be approximated within a single test-period (25-50 trials). By establishing optimal conditions, immediate perceptual organizations may appear which have considerable significance for the later development of the L-R auditory localization habit."—D. E. Johanssen (Skidmore).

1307. Gulliksen, H. A new theory of transfer applied to experiments in visual discrimination. *Psychol. Bull.*, 1938, 35, 657-658.—Abstract.—A. W. Melton (Missouri).

1308. Hamilton, H. C. The effect of short-wave radiation on maze learning in the white rat. *Psychol. Bull.*, 1938, 35, 637.—Abstract.—A. W. Melton (Missouri).

1309. Hanawalt, N. G. The effect of verbal suggestion in the recall period upon reproduction of visually perceived forms. *Psychol. Bull.*, 1938, 35, 692.—Abstract.—A. W. Melton (Missouri).

1310. Heathers, G. L. Alternation behavior in rats as a function of the time interval between trials. *Psychol. Bull.*, 1938, 35, 636.—Abstract.—A. W. Melton (Missouri).

1311. Hinton, R. T., Jr. The effect of a constant and superior environment upon the I.Q.'s of one hundred and seventeen children. *Psychol. Bull.*, 1938, 35, 681.—Abstract.—A. W. Melton (Missouri).

1312. Horst, L. v. d. Opmerkzaamheid en intelligentie. (Attention and intelligence.) *Ned. Tijdschr. Psychol.*, 1938, 6, 207-214.—Intelligence resembles instinct in that both are directed toward a rapid and adequate solution of a problem, but differs from it in possessing a conscious element (insight). Intelligence resembles talent in enabling the individual to master situations, but it is a general capacity whereas the latter is specific. Finally, intelligence differs from intellect in that the latter is concerned primarily with formal relationships, while intelligence requires a survey of a number of simultaneously occurring situations which cannot be grasped logically. All intelligent activity possesses a creative element which consists in a reorganization of given factors. Thus different types as well as quantities of intelligence may be distinguished. A simple and satisfactory test of intelligence, involving distributive as well as concentrated attention, is the Grünbaum test, consisting of numbers from 11 to 64, arranged in random order in 6 rows and 9 lines of large numbers. The subject's task is to find the numbers in arithmetic order, indicating his progress by naming the small number printed below each large one. This test enables one to construct attention curves for each 30-second period.—H. Beaumont (Kentucky).

1313. Hughes, B., & Schlosberg, H. Conditioning in the white rat. IV. The conditioned lid reflex.

*J. exp. Psychol.*, 1938, 23, 641-650.—Conditioned eyelid responses were established and extinguished in each of four rats. The conditioned stimulus, a buzz, was presented for 800 ms., and terminated simultaneously with the unconditioned stimulus, a puff of air to the cornea. The CR appeared as an anticipatory closure in all rats during the first 10 or 20 reinforcements. Its latency decreased as conditioning proceeded, approaching 150-200 ms. as the response became well established. The frequency with which anticipatory CR's occurred reached an average value of 60% during the second session, and varied around that value thereafter. Daily records showed a low incidence of CR's at the beginning and end of the session. The early stimuli apparently fell in a warming-up period, while the later ones were affected by inhibitory factors which developed as the session continued. The sessions (50 reinforcements in an hour) were too long. This probably accounts for the failure to go beyond a 60% average incidence. Extinction was not complete after two sessions of 60 unreinforced buzzes each.—*H. W. Karn* (Pittsburgh).

1314. Husband, R. W. Intercorrelations among learning abilities. *Psychol. Bull.*, 1938, 35, 671.—Abstract.—*A. W. Melton* (Missouri).

1315. Jackson, T. A., Stonex, E., Lane, E., & Dominguez, K. Studies in the transposition of learning by children. I. Relative vs. absolute response as a function of the amount of training. *J. exp. Psychol.*, 1938, 23, 578-600.—The aim of this study was to determine the effect of different amounts of practice of a discrimination habit upon transfer in the transposition experiment. 45 children varying in age from two and a half to six years were used as subjects. In each of four experiments equated groups were given different amounts of practice in a discrimination habit, then tested on transposed stimuli. Results show that, following a small amount of post-fixation practice of a discrimination habit, choice between transposed stimuli will be confused and unstable, with frequent reverting to position habits. Following a greater amount of practice, choice upon transposition is made on a relational basis. After a still greater amount of practice, some subjects at least will make choice on an absolute basis. These principles appear to hold for weight relata as well as for visual size relata. The transition from unstable choice to a stable relative choice and from a stable relative choice to an absolute choice is partly dependent upon the difficulty of the discriminated stimuli.—*H. W. Karn* (Pittsburgh).

1316. Kelley, T. L. Mental factors of no importance. *Psychol. Bull.*, 1938, 35, 658.—Abstract.—*A. W. Melton* (Missouri).

1317. Kotsovksy, D. Alter und Psyche. (Age and the psyche.) *Monatsberichte*, 1936, 1, 8-10.—Age brings with it certain psychological changes of both a qualitative and a quantitative nature. Among the latter may be mentioned diminished intensity of the associative processes and diminished

reactivity. The psychological profile becomes more conservative and the individual becomes more dependent upon external circumstances. There is less confidence and the individual may develop a fear of approaching death. Illustrations are provided from the lives of such men as Kant, Virchow, E. Dubois-Reymond, Wundt, etc.—*G. F. J. Lehner* (Vermont).

1318. Marshall, W. The immunological concept of learning. *Psychol. Bull.*, 1938, 35, 629.—Abstract.—*A. W. Melton* (Missouri).

1319. Melton, A. W., & McQueen-Irwin, J. Inter-serial competition of responses during the relearning of serial verbal material in the retroactive inhibition experiment. *Psychol. Bull.*, 1938, 35, 691-692.—Abstract.—*A. W. Melton* (Missouri).

1320. Miles, C. C. Intelligence and social adjustment. *Ment. Hyg.*, N. Y., 1938, 22, 544-566.—A discussion of the part played by intelligence in adjustment to social situations. This exposition includes the development of intelligence tests, the use of intelligence as an index of achievement, the phases of social adjustment involving intelligence, intelligence and educational adjustment, economic adjustment, and occupational choice. A comparison of the extremes of intelligence is given with case histories. The IQ is fairly constant except for the changes at the time of adolescence and the decline that occurs from early to late maturity. Intelligence plays an important part in the social adjustment of the individual, but other factors such as physical status and emotional conditions are also important.—*P. Brand* (New York City).

1321. Morgan, J. J. B. Treatment of enuresis by the conditioned reaction technique. *Psychol. Bull.*, 1938, 35, 632-633.—Abstract.—*A. W. Melton* (Missouri).

1322. Patrick, J. R. Thresholds of brightness relations and discrimination learning by chicks. *Psychol. Bull.*, 1938, 35, 639-640.—Abstract.—*A. W. Melton* (Missouri).

1323. Pauli, R. Die Arbeitskurve als ganzheitlicher Prüfungsversuch (als Universaltest). (The work curve as a total test method.) *Arch. ges. Psychol.*, 1938, 100, 401-423.—It has long been known that it is important to know not only what an individual can do (as determined by intelligence tests and any of the more specific aptitude tests) but also what he will do. As a test to determine this latter variable more accurately the author has employed the work curve (addition problems) with a large number of subjects, both old and young; and has obtained data from which he concludes that the work curve offers a diagnostic test for general ability and character (specific character traits are listed) better than any other test. The information obtained may be of great importance in vocational guidance.—*G. F. J. Lehner* (Vermont).

1324. Pennington, L. A., & Waters, R. H. The anticipation method in paired associate learning. *J. Psychol.*, 1938, 6, 281-283.—An experimental



comparison of the traditional and anticipation methods with paired associate materials shows that the latter gives a more complete set of data, requires less experimental time, enables more rapid and efficient learning, and is preferred by the subjects.—*E. D. Hunt (Brown)*.

1325. **Porter, E. H., Jr.** The influence of delayed instructions to learn upon human performance. *J. exp. Psychol.*, 1938, 23, 633-640.—In this study experimental groups of subjects were led to react to nonsense syllables, technical terms, and riddles, first without intention to learn and later with instructions to learn. The final achievement was equivalent to the achievement of control subjects who received the same material for the same amount of time but who from the outset had been instructed to learn. On the basis of the assumption that the introduction of instructions to learn served to institute or establish differential effects of responses, it is concluded that the study agrees with Tolman's statement that the law of effect, if valid at all, is only slightly so, since the amount of improvement acquired without differential effect is practically as great as that acquired with differential effect.—*H. W. Karn (Pittsburgh)*.

1326. **Ratcliff, M. M.** The varying function of affectively toned olfactory, visual and auditory cues in recall. *Amer. J. Psychol.*, 1938, 51, 695-701.—"Numbers were combined by the paired-associate method with P and U sounds, colors, and odors with instructions to learn so that when the sensory cue alone was given the correct number would be recalled. Data are based on immediate, 5- and 10-min. delayed recall analyzed in terms of amount and speed of recall, as measured by number of correct responses and reaction-time. The results . . . : (1) Recall was greater and reaction-time was less for numbers paired with P colors and sounds than for numbers combined with U colors and sounds. In olfaction, recall was greater and reaction-time less for numbers paired with U than with P odors. (2) More Ss recalled more numbers paired with P than with U colors and sounds and recalled them in shorter times." (In olfaction, the reverse was true.) "(3) Learning was more rapid for numbers combined with P colors and sounds than for numbers combined with U colors and sounds. . . . The results of this study lend some support to a theory of repression for U material in the auditory and visual sense fields, but not in the olfactory quale. Explanation . . . may be attempted on three levels; namely, the neurological, the phylogenetic, and the stimulus-value."—*D. E. Johannsen (Skidmore)*.

1327. **Razran, G. H. S.** Conditioning away social bias by the luncheon technique. *Psychol. Bull.*, 1938, 35, 693.—Abstract.—*A. W. Melton (Missouri)*.

1328. **Richards, T. W.** The emergence of mental abilities. *Psychol. Bull.*, 1938, 35, 682.—Abstract.—*A. W. Melton (Missouri)*.

1329. **Ryan, T. A.** Dynamic, physiognomic, and other neglected properties of perceived objects: a new approach to comprehending. *Amer. J. Psychol.*,

1938, 51, 629-649.—The author examines certain products of activity which suggest extensions of apprehending in the direction of "higher mental processes." Since it is difficult to give a functional account of a performance unless the products of that functioning have been described, the author starts by summarizing the more important properties of apprehended products: the spatial, temporal, qualitative, and dating aspects of apprehended objects. Inspecting and examining as psychological functions are briefly described in order to clarify their relation to the functions of thinking and comprehending, with which they are often confused. Besides the products of the relatively simple process of apprehending and those of the relatively complex process of comprehending, the author believes that there are certain products which are intermediate between the two. These are: extensions, integrations, and schematizations of spatial and temporal properties of objects; spatial and temporal frameworks; objects with physiognomic and social properties; generalized, classified, and ordered objects; and causal and dependent relations of objects. These products are described and examples given. The author feels that he has collected evidence to show that these intermediate objects are not the result of two temporally successive steps, but rather that "all of the properties issue at the same time as attributive to a single unit." It is suggested that there is "a continuous series of activities ranging from the barest kind of apprehending, on the one side, to comprehending in which the apprehensive resources are at a minimum, on the other." Such an hypothesis demands more, and careful, studies of the intermediate products.—*D. E. Johannsen (Skidmore)*.

1330. **Schaff, W., & Sgonina, K.** Untersuchungen über das zukunftsbedingte Verhalten von Mäusen. (A study of the teleological behavior of mice.) *Z. Tierpsychol.*, 1938, 2, 126-132.—A mouse learned to select the unobstructed route to a goal from the dividing point between a direct and a circuitous approach, which had been alternately and irregularly blocked. This was probably done by observing the obstruction, which was visible from this point. Such learning usually took place gradually, but in two cases the correct choice was made spontaneously. To release himself from a simple restricting band which made goal seeking impossible, the mouse instinctively used his teeth whenever he discovered the obstruction. Teleological behavior is not to be assumed.—*P. L. Krieger (Leipzig)*.

1331. **Schneirla, T. C.** The problem of organization in ant learning. *Psychol. Bull.*, 1938, 35, 639.—Abstract.—*A. W. Melton (Missouri)*.

1332. **Sganzini, C.** Was heisst denken? Verhaltens-theoretisch Analyse des Denkprozesses. (What is it to think? A behavioral theoretical analysis of the cognitive process.) *Mensch u. Welt*, 1939, No. 5. Pp. 32.—*R. R. Willoughby (Brown)*.

1333. **Shepard, J. F.** Selection in maze learning. *Psychol. Bull.*, 1938, 35, 637-638.—Abstract.—*A. W. Melton (Missouri)*.

1334. Skinner, B. F. The frequencies of occurrence of associated words. *Psychol. Bull.*, 1938, 35, 675.—Abstract.—A. W. Melton (Missouri).

1335. Snoddy, G. S. The role of stimulation in learning. *Psychol. Bull.*, 1938, 35, 689-690.—Abstract.—A. W. Melton (Missouri).

1336. Spearman, C. E. Measurement of intelligence. *Scientia, Milano*, 1938, 64, 75-82.—The conception of a small number of "faculties," to which the innumerable mental activities are attributed, suffers from the same indefiniteness as do the various theories of "types." Both doctrines assume that there exists some functional unity within the faculty or type, which is improbable. Turning to statistics for help, psychology has learned to express mental functions in the form of a few "factors," all of them independent of each other. The chief intellectual factor, called "g," enters into all cognitive performances. It measures an activity called "eduction," which consists in passing either from two items to their interrelation or from one item and a relation to the correlative item. Other factors measure verbal or mechanical abilities, etc., or only ratios between abilities. The factor "w" is interpreted as something of the nature of will power, extending its effect, however, to cognition. The success achieved in measuring "g" by means of the Penrose and Raven test is not matched by tests for the other factors.—E. Franzen (New York City).

1337. Strauss, E. Versuche an gefangenen Rabenvögeln. (Experiments with captive birds of the raven family.) *Z. Tierpsychol.*, 1938, 2, 172-197.—A hooded crow showed some preference for certain spots in his cage as hiding places, and appeared to remember quite well the location of former hiding places, or at least their immediate vicinity. He remembered a place where bait had been placed for 7 minutes, one where food had been hidden by the experimenter for 10 minutes, one where he himself had hidden food for 80 minutes after the experimenter had destroyed all traces and replaced them with misleading traces in the immediate vicinity, and for 155 minutes when all traces were destroyed so that only spatial orientation could prevail. When everything was left undisturbed, the bird could remember the location for 4½ hours. He immediately succeeded in lifting a glass cover under which meat had been hidden, but daws needed more time to perform this feat. The legs of the crows and the heads of the daws seem to play a significant part in their visual orientation. Their reactions to stuffed birds and to plaster models were friendly or unfriendly, depending on the species represented.—P. L. Krieger (Leipzig).

1338. Tolman, E. C. Prediction of vicarious trial and error by means of the schematic sowbug. *Psychol. Bull.*, 1938, 35, 629.—Abstract.—A. W. Melton (Missouri).

1339. Wåhlén, A. Intelligensbegreppet. (The concept of intelligence.) *Svenska Läkartidn.*, 1938, 35, 1771-1789.—On the basis of a general discussion of the various theories of intelligence the writer

offers his own definition: "Intelligence is the total usability of the mass of memories as a means for mental object representation." It is stressed that it is the usability of the mass of memories and not the individual's ability of mental object representation which is important. The ability of the individual changes on account of physiologically and pathologically conditioned variations of mental functions which are not of an intellectual nature. A highly depressed person, for example, has poor intellectual performance ability, but it cannot be said that he became less intelligent when he became depressed. By "total usability" is meant "average usability" and not special usabilities within certain spheres of knowledge. By "mental object representation" is meant the representative image-creating function of the mental units of function.—M. L. Reymert (Mooseheart Laboratory for Child Research).

1340. Warden, C. J. Problem solving in monkeys. (Film.) New York: Columbia Univ., 1938. 420 ft. 16 mm. \$30.00 sale.—Covers the behavior of the *Cebus* and *rhesus* monkeys on two complex tasks: (1) selecting the proper string among several arranged in patterns on a platform adjacent to the test cage, (2) use of tools (rakes) in securing food placed beyond normal reach. The latter includes the following stages: (a) use of a single rake, (b) use of short rake to get another one long enough to reach the food, (c) continuing the series up to 8 rakes, in a complex series performance, in securing the reward. (First demonstration of such complicated tool-using capacity in monkeys.)—C. J. Warden (Columbia).

1341. Warden, C. J., & Jackson, T. A. Development and behavior of the white rat. (Film.) New York: Columbia Univ., 1938. 350 ft. 16 mm. \$25.00 sale.—The first part covers the physical and behavioral development of the white rat from birth to three months of age. The several stages of development and the maternal behavior associated therewith are indicated by appropriate titles. The second part shows the adult rat being tested on three well-known types of laboratory apparatus: (1) Columbia obstruction apparatus—hunger drive, (2) maze—before and after mastery, (3) problem box—before and after mastery.—C. J. Warden (Columbia).

1342. Waters, R. H. The law of acquaintance. *Psychol. Bull.*, 1938, 35, 625.—Abstract.—A. W. Melton (Missouri).

1343. Weld, H. P., & Roff, M. A study in the formation of opinion based upon legal evidence. *Amer. J. Psychol.*, 1938, 51, 609-628.—The present study analyzes the manner in which an opinion is built up on the basis of presented data. Evidence on the Thomas Hoag case was divided into 12 installments and read to a total of 178 upper-class college students preparing for law. At the end of each installment the reader stopped and asked the S's to record their judgments of the defendant's guilt on a 9-point scale. The installments of evidence were presented in 4 different orders. The results show: (1) the mere indictment leads to a slight belief

in guilt; (2) the direction of the mass opinion is in general a function of the testimony; (3) as evidence accumulates on one side, the mass opinion moves in that direction, but more slowly; (4) the effectiveness of an item of evidence is a function of its position in the series; (5) of the 2136 judgments, 24% were in the "doubtful," 5% in the "guilty," and 2% in the "innocent" category—i.e., many persons never reached conviction; (6) individuals differ markedly in the ease with which they shift their opinion as evidence piles up. These results are discussed theoretically.—D. E. Johannsen (Skidmore).

1344. Wherry, R. J. **Factorial analysis of learning dynamics in animals.** *Science*, 1938, 88, 479.—Abstract.—F. A. Mole, Jr. (Brown).

1345. Wile, I. S., & Davis, R. M. **A study of the behavior of 250 children with mental age ten years.** *Amer. J. Orthopsychiat.*, 1938, 8, 689-709.—Children between the ages of 7 and 15 applying at the children's health class at Mount Sinai Hospital were selected on the basis of the Stanford-Binet mental age rating. Those referred as reading disability cases or as mental defectives were excluded. The group was analyzed on the basis of age, IQ, grade placement, reading and arithmetic achievement, and reasons for referral. The results indicate that: (1) basal age is a better indicator of school progress than mental age, (2) mental age has no definite implications for behavior, (3) problem behavior is more dependent upon basal age than mental age, (4) it is probably more effective to classify school children according to basal age than mental age, and (5) disparity between age and basal age is inversely related to the competence of a person for social adjustment. One graph and 17 tables are included. There is a short discussion by W. C. Olson.—S. W. Bijou (Delaware State Hospital).

1346. Williams, S. B. **Resistance to extinction as a function of the number of reinforcements.** *J. exp. Psychol.*, 1938, 23, 506-522.—The behavior of 140 white rats was studied during the process of extinction of a bar-pressing habit which had been established by food-reinforcement to four different degrees of strength. Three measures of resistance to extinction were used: the number of responses during extinction, total extinction time, and the mean time between extinction responses (rate of response). Resistance to extinction was found to increase with the number of reinforcements, by all measures used. This increase has a negative acceleration, which is described by two empirical equations based on the two most reliable measures. According to their effectiveness in differentiating the amount of reinforcement, the measures of resistance to extinction rank in the following order: number of responses in extinction, total extinction time, and rate of response.—H. W. Karn (Pittsburgh).

1347. Witkin, H. A. **"Hypotheses" in rats: a critique.** *Psychol. Bull.*, 1938, 35, 638.—Abstract.—A. W. Melton (Missouri).

1348. Wolfe, D. L. **Learning difficulty and magnitude of stimulus variation.** *Psychol. Bull.*, 1938, 35, 635.—Abstract.—A. W. Melton (Missouri).

1349. Woodrow, H. **The relation between goodness of performance and favorableness of conditions.** *Amer. J. Psychol.*, 1938, 51, 665-676.—The purpose of the present study was "to determine the effect of a change from 2 to 4 in the number of simultaneously presented letters at widely different levels of difficulty, the latter being brought about by wide variation in exposure time." The letters were presented by a drop-screen tachistoscope for .1, .02, .015, and .01 sec.; 4 separations of the letters were used. Results show that the effect upon the proportion of letters correctly reported, of changing the number of letters presented from 4 to 2, is much greater when the exposure time is long than when it is short. The significance of the obtained results for a general law of the relationship between goodness of performance and the favorableness of conditions is considered, and it is concluded that "all the data . . . may be accounted for by one fairly simple law, expressing in the form of a hyperbola the relation between two variables . . . there exists a law which prevails in the case of all measurable task-performances between units of goodness of performance and units of favorableness of the determining conditions, to the effect that, as the conditions are made unfavorable, goodness of performance drops at first rapidly and almost proportionally to the number of units of decrease in favorableness . . . and as decrease in favorableness . . . becomes . . . large, the drop in goodness . . . occurs at a progressively slower rate."—D. E. Johannsen (Skidmore).

1350. Woodrow, H. **The relation between the goodness of a performance and the total constellation of its objective conditions.** *Psychol. Bull.*, 1938, 35, 675-676.—Abstract.—A. W. Melton (Missouri).

1351. Youtz, R. E. P. **The weakening of word-number connections by "punishment."** *Psychol. Bull.*, 1938, 35, 690-691.—Abstract.—A. W. Melton (Missouri).

1352. Zener, K. **An experimental investigation of the role of drive in the acquisition and performance of conditioned responses.** *Science*, 1938, 88, 478-479.—Abstract.—F. A. Mole, Jr. (Brown).

[See also abstracts 1372, 1373, 1396, 1397, 1403, 1431, 1440, 1444, 1447, 1461, 1529, 1545, 1589, 1594, 1607, 1662, 1712, 1726, 1730, 1744, 1758.]

## MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

1353. Barnes, R. M., & Mundel, M. E. **Studies of hand motions and rhythm appearing in factory work.** *Univ. Ia. Stud. Engng*, 1938, Bull. 12. Pp. iv + 62.—Five investigations of hand motions were made, two using the principle of the kymograph, two using the photo-electric cell and the kymograph, and one using an electrical pursuit board. It was found



that the per cent of cycle time and cycle distance in acceleration, movement at a constant velocity, and retardation tended to be independent of the amount of effort exerted by the operator. The average velocity of the hand moving through paths involving continuous curved motions was considerably higher than on those involving a number of abrupt changes of direction. Motions in a horizontal direction tended to produce higher average velocities than similar type motions in a vertical direction. Motions involving mainly the elbow joint tended to produce higher average velocities than motions involving mainly the shoulder joint. In a study of the effect on positioning time of changing the amount of bevel surrounding a hole in a steel bushing into which a pin was to be inserted, it was found that the time required increased as the amount of bevel decreased. It was suggested that the standard times for certain therbligs cannot be given as independent values, since they may be influenced by other therbligs in the cycle. Likewise the standard time for a transport cannot be specified as a standard time without considering the nature of the cycle in which it takes place. Operators were found to prefer merely regular work to a rhythmical method and to be more efficient at the former.—*B. Wellman* (Iowa).

1354. Beebe, F. S. A further study of the analysis of movement on the basis of latent times and variabilities. *Res. Quart. Amer. Ass. Hlth phys. Educ.*, 1938, 9, No. 1, 10-24.—Applying the technique of Lapp, the writer has investigated the latent times of contraction of the intact human rectus femoris in response to various forms of stimulation. "On the basis of the data presented, movement depends on the neural pattern, which in turn depends on the stimulus pattern. From this standpoint, all movements are, in general, alike, the only difference being in the number of neurones involved." It is suggested that instead of the classical reflex-voluntary dichotomy of movements, they be classified according to the complexity of the neural pattern.—*F. W. Finger* (Brown).

1355. Bender, M. B. Sensitized pupillary dilator and facial muscles as indicators of sympathetic and parasympathetic substances in blood. *Proc. Soc. exp. Biol.*, N. Y., 1938, 39, 62-65.—By sectioning the superior cervical ganglion on one side and the facial nerve on the opposite side in monkeys, cats, dogs, and rabbits, indicators for sympathetic and parasympathetic substances were obtained. The degree of pupillary dilation on the side of the sectioned cervical ganglion varies with the amount of adrenalin in the blood. Sectioning of the facial nerve renders facial muscles sensitive to acetylcholine. Under emotional stress the cat showed predominantly sympathetic activity, while in the monkey parasympathetic activity was most marked, although both sorts of activity were present in both animals. The denervated facial muscles were also used as indicators of end points in the determinations of rates of hydrolysis by sera and cerebrospinal fluids.—*H. Peak* (Randolph-Macon).

1356. Bennett, G. A. Experimentelle Studien über Zungenbewegungen. (Experimental studies of tongue movements.) *Z. Anat.*, 1937, 108, 31-50.—Experiments with narcotized apes, rabbits, rats, dogs, and cats indicate a similarity in tongue movements.—*P. L. Krieger* (Leipzig).

1357. Bergren, W. R., & Wiersma, C. A. G. Chemical changes in the adductor muscle of the cheliped of the crayfish in relation to the double motor innervation. *J. gen. Physiol.*, 1938, 22, 193-206.—*M. A. Rubin* (Worcester State Hospital).

1358. Brown, R. R. The order of certain psychophysiological events following intravenous injections of morphine. *Psychol. Bull.*, 1938, 35, 664-665.—Abstract.—*A. W. Mellon* (Missouri).

1359. Burge, W. E., Krouse, R., Terry, H. L., Burge, E., Monsson, C. D., & Koons, E. The effect of exercise, fatigue, and exhaustion on the electrical potential of the brain cortex and the threshold of the knee jerk. *Res. Quart. Amer. Ass. Hlth phys. Educ.*, 1938, 9, No. 3, 45-53.—A galvanometric light system was employed to record electro-cortical changes. "Exercise of various kinds . . . was found to produce an increase in the negative potential of the motor cortex of the brain and a rise in the threshold of the knee jerk, which was followed by a decrease to the initial resting level during the subsequent period of rest. Excessive exercise, however, decreased the negative potential of the brain, and very severe exercise and exhaustion not only decreased the negative potential, but produced a reversal in polarity. . . . The increase in the negative potential of the motor cortex during exercise, as found in this investigation, is attributed to an excess of incoming negative charges over outgoing. . . . In very excessive and strenuous exercise the outgoing nerve impulses or negative charges to the muscles are sufficiently in excess of the negative charges coming in from the skin and outlying sense organs to render the motor cortex electro-positive with a loss in irritability, and resulting exhaustion."—*F. W. Finger* (Brown).

1360. Carpenter, A. A critical study of the factors determining effective strength tests for women. *Res. Quart. Amer. Ass. Hlth phys. Educ.*, 1938, 9, No. 4, 3-32.—A critical review of various tests of strength, involving factor analysis. In the intercollegiate type and the Matin type tests, pure strength is the one outstanding factor; both strength and velocity are important factors in athletic performance, velocity being the more important of the two. Girth of arms and legs and width of joints do not indicate limb strength. Bibliography of 45 titles.—*F. W. Finger* (Brown).

1361. Coghill, G. E. Early movements of the opossum with special reference to the walking gait. *Proc. Soc. exp. Biol.*, N. Y., 1938, 39, 31-35.—Observations of opossum litters suggest that on the first day in the pouch "there are functional commissural relations at the level of the brachial plexus, a descending (motor) path as far caudad as the lower thoracic level, and an ascending pathway from the

lumbo-sacral region to the upper cervical segments of the brain; also that the hind legs become mobile on the 7th day in the pouch, and at a more advanced stage they become integrated with the forelegs so as to execute the walking gait before they are capable of reflex action. In the development of walking, therefore, in the opossum, as in amblystoma, the gait is essentially a total pattern of action while reflexes serve for orientation and adjustment to surfaces."—*H. Peak* (Randolph-Macon).

1362. Collins, D. A., & Spiegel, E. A. Ocular rotation. Influence of anesthetics and operations on various parts of the central nervous system. *Proc. Soc. exp. Biol., N. Y.*, 1938, 39, 100-102.—In experiments on 67 cats before and during the course of anesthesia, the position of the pupil or of a linear scar burnt into the anesthetized cornea as closely as possible to the vertical diameter was recorded. The smallest range of rotation was noticed under the influence of ether, chloroform, and Grebant's mixture (so-called cortex-anesthetics). The range was greatly increased under barbiturates (brain-stem anesthetics). The analysis of this phenomenon by experiments on the cortex, brain-stem, and labyrinth indicates that it is due not only to the elimination of pros- and diencephalic impulses, but in part also to an effect upon lower parts of the brain-stem.—*H. Peak* (Randolph-Macon).

1363. Cornsweet, A. C. Recovery sequence after anesthetization. II. Cyclopropane and nitrous oxide. *Science*, 1938, 88, 479.—Abstract.—*F. A. Mote, Jr.* (Brown).

1364. Davis, R. C. Induced shift of muscular tensions during mental work. *Psychol. Bull.*, 1938, 35, 667-668.—Abstract.—*A. W. Melton* (Missouri).

1365. Denny-Brown, D., & Pennybacker, J. B. Fibrillation and fasciculation in voluntary muscle. *Brain*, 1938, 61, 311-334.—Close inspection of spontaneous twitching of muscle fibers reveals characteristics which enable the situation of the disturbance of excitability to be deduced. The single discharges of disordered anterior horn cells are thus distinguishable from the coarser and longer twitches arising from affections of the intramuscular nerves, and both are distinct from the fine fibrillation of denervated muscle. Combinations of the various types may occur. In circumstances of fatigue or excessive loss of sodium chloride involuntary muscular contractions appear. Those due to fatigue are small bursts of contraction in a fasciculus, and are of a type such as would be caused by irregular discharge spreading to and through all the nerve bundles in the fasciculus. Those of myokymia associated with hyperhidrosis are of similar nature but of more widespread distribution, and more intense discharge. Both are clearly related to muscular cramp. The prolonged discharge, compared with the single twitch of fibrillation and the fasciculation of neurone discharge, gives the resulting fascicular movement a slower, undulating appearance.—*W. Marshall* (Appleton Clinic, Wis.).

1366. Dyer, J. T. Revision of the backboard test of tennis ability. *Res. Quart. Amer. Ass. Hlth phys. Educ.*, 1938, 9, No. 1, 25-30.—This article describes a test of tennis playing ability, which correlates .92 with actual ability as determined by tournament results.—*F. W. Finger* (Brown).

1367. Elmgren, J. Några synpunkter på känslolivets psykologi. (Some points of view regarding the psychology of feelings and emotions.) *Svenska Läkartidn.*, 1938, 35, 1819-1839.—This is a theoretical and critical discussion of the principal theories of feelings and emotions; the writer agrees with Janet and Shand.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

1368. Ferguson, L. W. Correlates of woman's orgasm. *J. Psychol.*, 1938, 6, 295-302.—An analysis of the 53 suggested correlates of woman's orgasm capacity given in G. V. Hamilton's *A Research in Marriage* shows only 12 to be statistically significant.—*E. D. Hunt* (Brown).

1369. Gaskill, H. V. Patterns in emotional reactions: II. Heart rate and blood pressure. *Psychol. Bull.*, 1938, 35, 667.—Abstract.—*A. W. Melton* (Missouri).

1370. Glassow, R., Colvin, V., & Schwarz, M. Studies in measuring basketball playing ability of college women. *Res. Quart. Amer. Ass. Hlth phys. Educ.*, 1938, 9, No. 4, 60-68.—Statistical analysis of the Young and Moser battery, and an attempt to evolve an objective measure (sample) of basketball playing ability to be used as a method of grading in college classes.—*F. W. Finger* (Brown).

1371. Goldstein, K. The tonic foot response to stimulation of the sole: its physiological significance and diagnostic value. *Brain*, 1938, 61, 269-283.—This study is concerned with the tonic response of the foot to stimulation of the sole. The character of the reaction is described. It is a slow movement, elicited by touch or pressure to the sole or the ball of the foot. Increasing stimulation, especially if painful, leads to an increase of the movement. The posture persists for some time after cessation of stimulation, and then the foot slowly returns to its habitual position. A relationship is suggested between the tonic foot response and lesions of the frontal lobe. This tonic response is considered as one of the earliest signs of a lesion of the frontal lobe. It appears earlier than the Babinski response or other pyramidal tract signs.—*W. Marshall* (Appleton Clinic, Wis.).

1372. Grohmann, J. Modifikation oder Funktionsreifung. Ein Beitrag zur Klärung der wechselseitigen Beziehungen zwischen Instinkthandlung und Erfahrung. (Modification or maturation. A contribution to the clarification of the mutual relationship between instinct and experience.) *Z. Tierpsychol.*, 1938, 2, 132-144.—Young pigeons, deprived of any chance of learning to fly, developed the ability to do so without individual experience. Attempts to hasten this process by forcing them to make flying motions were unsuccessful. It follows

that the development of the ability to fly is a maturational and differentiatonal process which depends on the developmental condition of the organism and cannot be influenced by learning and experience. Physically inferior birds made earlier flying movements, but the developmental process was completed at a later age than in normal birds. It seems that there is a special mechanism which usually inhibits the instinctive act until a certain age, and that this mechanism is absent in physically inferior birds.—*P. L. Krieger* (Leipzig).

1373. Hackensmith, C. W., & Miller, L. A comparison of the academic grades and intelligence scores of participants and nonparticipants in intramural athletics at the University of Kentucky. *Res. Quart. Amer. Ass. Hlth phys. Educ.*, 1938, 9, No. 1, 94-99.—Mean intelligence test scores and academic grades are compared between 161 participants and 161 nonparticipants in intramural athletics. Participants in the sports are shown to have higher intelligence test scores than nonparticipants ( $D/\sigma_D = .25$  to 2.74); participants also excel in grades ( $D/\sigma_D = .27$  to 1.78).—*F. W. Finger* (Brown).

1374. Hanzlik, P. J. Purkinje's pioneer self-experiments in psychopharmacology. *Calif. west. Med.*, 1938, 49, 1-22.—A brief history and a complete list of Purkinje's biological and medical discoveries are given. The following self-experiments of Purkinje in psychopharmacology are described and discussed: (1) the effect of belladonna on the eye; (2) the disturbance of vision by digitalis; (3) the effects of ingested camphor; (4) the effects of ingested opium nostras; (5) the effects of ingested belladonna; (6) the effects of ingested stramonium; (7) the effects of ingested turpentine, with and without alcohol; and (8) the effects of ingested oil of turpentine.—*W. J. Brogden* (Johns Hopkins).

1375. Harris, R. E., & Ingle, D. J. The survival of animals with and without adrenal medulla in conditions of stress. *Psychol. Bull.*, 1938, 35, 667.—Abstract.—*A. W. Mellon* (Missouri).

1376. Hasama, B. Über den Einfluss der Labyrinthreizung auf die Leber im Aktionsstrombild. (The influence of labyrinth stimulation on the action currents of the liver.) *Z. Biol.*, 1938, 99, 169-177.—When warm or cold water was injected through the tympanum of a rabbit's ear, the liver became electro-negative, blood sugar increased, and the calcium content of the blood serum decreased. With continued irrigation the effects reached a peak, followed by a leveling off. Turning the animal over produced similar effects, with long-continued hyperglycemia and calcium deficiency. Blocking of the sympathetic nerve endings with ergot abolished, at least in large part, this action. The effect is either increased or greatly decreased by the severing of both splanchnic nerves. The effects of labyrinth stimulation are explained in terms of these phenomena.—*P. L. Krieger* (Leipzig).

1377. Hovland, C. I. Determinants of compromise resolutions of motor conflicts. *Psychol.*

*Bull.*, 1938, 35, 664.—Abstract.—*A. W. Mellon* (Missouri).

1378. Hovland, C. I., & Sears, R. R. Experiments on motor conflict. I. Types of conflict and their modes of resolution. *J. exp. Psychol.*, 1938, 23, 477-493.—Manual motor conflict situations corresponding to Lewin's Types I, II, and III were presented to different groups of subjects. The situations were so arranged that unless the subject blocked completely there were only three possible modes of resolution: responding to one stimulus object alone, responding to first one and then the other, or making an altogether new response which represented a compromise between the two incompatible responses. Lewin's statement that Type I conflicts (approach-approach) are usually resolved by responding to one or both of the stimulus objects was verified. Indirect verification was given to his statements that Types II (approach-avoidance) and III (avoidance-avoidance) conflicts are resolved by "withdrawal from the field." Both types produced more blocking and compromise responses (III more than II) than did Type I. These results are shown to be consistent with deductions based either on Lewin's field theory or on a set of five postulates deriving from reaction psychology.—*H. W. Karn* (Pittsburgh).

1379. Hutto, L. E. Measurement of the velocity factor and of athletic power in high school boys. *Res. Quart. Amer. Ass. Hlth phys. Educ.*, 1938, 9, No. 3, 109-128.—Physical tests were applied to 406 high-school boys and the results treated by Thurstone's method of factor analysis. "The unitary factors which were isolated as contributing to accomplishment in these events were strength, weight, muscle velocity, a structure factor, an arm or fore-arm strength factor, and an artifact or a factor too small in amount to identify." Techniques were devised to aid in evaluation and prediction of athletic ability.—*F. W. Finger* (Brown).

1380. Kaufman, W. Vagal influences on reflexes of somatic musculature. *Proc. Soc. exp. Biol., N. Y.*, 1938, 39, 10-11.—It is shown that the normal afferent vagal stream can inhibit reflexes of somatic musculature and that the degree of this inhibition varies from animal to animal. In anesthetized dogs, vagosympathetic trunks were isolated for cold block. The trachea was connected to rebreathing tanks. The left sciatic nerve was isolated, the hamstring branches cut, and the posterior tibial nerve severed so that the central end could be placed on electrodes connected to the secondary of an inductorium. The tendon of the tibialis anticus was connected to an isotonic spring tension myograph. The amplitude of the reflex increased when the vagi were cold blocked. On deblocking, the reflex decreased to zero. In some animals this alternation was inexhaustible.—*H. Peak* (Randolph-Macon).

1381. Keeler, L. D. The effect of maturation on physical skill as measured by the Johnson physical skill test. *Res. Quart. Amer. Ass. Hlth phys. Educ.*, 1938, 9, No. 3, 54-58.—This study indicates that



there is a much closer relationship between physical skill and chronological age than between physical skill and mental age, school age, or intelligence. "Physical skill as measured matures (or reaches its peak) at age 16 and maintains its efficiency through age 20, after which time decrease in physical skill makes itself evident." A formula is tentatively suggested for computation of a physical quotient (P.Q.).—F. W. Finger (Brown).

1382. Konzett, H. *Förderung von Schlaf und Narkose durch Farbstoffe.* (Facilitating sleep and narcosis through coloring matter.) *Arch. exp. Path. Pharmak.*, 1938, 188, 349-359.—Preliminary treatment with coloring matter resulted in a deeper narcosis in rats and rabbits to which narcotics were administered later.—P. L. Krieger (Leipzig).

1383. Kotovsky, D. *Zur Frage der Reaktionsvererbung. (Vererbte Langlebigkeit.)* (Concerning the inheritance of reaction patterns—hereditary longevity.) *Monatsberichte*, 1935, 1, 2-8.—The author reviews the experimental literature concerning the problem of the transmission of induced characteristics and concludes that in the light of these results the inheritance of longevity may be viewed as the transmission of a specific reaction capacity of the body to two large classes of stimuli, external and internal.—G. F. J. Lehner (Vermont).

1384. Kotovsky, D. *Die Psychologie der Todesfurcht.* (The psychology of the fear of death.) *Monatsberichte*, 1936, 1, 21-40.—The author discusses the fear of death as manifested in the animal scale (through the various self-preservative reflexes and responses) and in man. Concerning the latter, he discusses the various factors which influence the fear of death, such as the fear of pain, fear of the unknown, the external unpleasant experiences associated with death and burial, and the disappointment and qualms of conscience at the undeveloped potentialities now forever to be denied. Out of the lives and writings of such men as Schopenhauer, Montaigne, Wagner, Rembrandt, Arzybascheff, Tolstoy, etc., the author draws illustrations to show how different individuals attach different degrees of importance to the various factors listed. It is concluded that man has both an unconscious and a conscious fear of death. The death instinct postulated by Metschnikoff, as well as the views of Blacker and Freud, are discussed.—G. F. J. Lehner (Vermont).

1385. Lacroze, R. *L'angoisse et l'émotion.* (Anxiety and emotion.) Paris: Boivin, 1938. Pp. 291. 50 fr.—In the first section of the book the author gives a reconstructive analysis of the structure of emotion; he believes that an explanation of the affective nature of emotion demands a retracing of experience to a specific anxiety which is not conditioned by any one experience and which is a datum of human consciousness. The second section deals with the genesis of the elementary emotions. In the third section the problem of human anxiety is discussed from the metaphysical point of view and an attempt is made to discover the sources of this

primordial feeling under general conditions of life. Bibliography.—G. Goldman (Sorbonne).

1386. Leeuw-Aalbers, A. J. de. *Enkele critische beschouwingen over de metrische skala van Oseretzky.* (Some critical remarks concerning the metric scale of Oseretzky.) *Ned. Tijdschr. Psychol.*, 1938, 6, 215-230.—Oseretzky's scale includes three tests of co-ordination and one each of reaction time, simultaneous activities, and isolated manipulations. It involves the following components: activity sequences, automatic movements, rhythm, strength, muscle tonus, directed movements, and regularity. The author found it necessary to modify the scale in order to make it valid for children in the Netherlands.—H. Beaumont (Kentucky).

1387. Maier, N. R. F., & Sherburne, B. J. *The use of sulfanilamide in the treatment of "sniffles" in rats.* *J. Psychol.*, 1938, 6, 247-259.—Treatment with sulfanilamide effected cures in rats which had contracted "pneumonia" in 86% of 14 cases; 100% of a control group of 7 succumbed to the disease. There was no evidence to show that sulfanilamide can exert a prophylactic effect on the disease; 2 animals receiving sulfanilamide contracted "sniffles" in spite of the treatment.—E. D. Hunt (Brown).

1388. McElroy, H. N. *A report on some experimentation with a skill test.* *Res. Quart. Amer. Ass. Illth phys. Educ.*, 1938, 9, No. 3, 82-88.—Correlations of .48 to .64 were found between tests of athletic skill and strength. "The low correlations indicate that the Skill Test measures other qualities than strength." This test, moreover, selects successful athletic competitors "with the same degree of accuracy that a skilled observer or coach would have after several days or even weeks of intimate study and observation of the same individual." The importance of leg movements in sports is emphasized.—F. W. Finger (Brown).

1389. Metheny, E. *Studies of the Johnson test as a test of motor educability.* *Res. Quart. Amer. Ass. Illth phys. Educ.*, 1938, 9, No. 4, 105-114.—Factor analysis of the Johnson test isolated three factors, identified as speed of movement, strength to handle one's own weight, and motor educability. An abbreviated form of the test was devised, the results of which correlated .977 with the original battery. The possibility of testing for "pure" motor educability is indicated.—F. W. Finger (Brown).

1390. Porter, J. M., Jr. *Adaptation of the galvanic skin response.* *J. exp. Psychol.*, 1938, 23, 553-557.—Evidence is presented which shows that when the galvanic skin response is adapted to one mode of stimulation the number of presentations of a second, and immediately subsequent, mode of stimulation necessary to secure the adaptation of the response is appreciably diminished. Transfer of adaptation is indicated. The number of stimulations required to secure adaptation of the response tends to decrease during successive experimental sessions. Interpolation of unfamiliar stimuli during the presentation of a series of familiar stimuli acts

to facilitate (or disinhibit) the diminishing response to the familiar stimulus.—*H. W. Karn* (Pittsburgh).

1391. **Powell, E.** [Ed.] **Neuromuscular function and development.** *Res. Quart. Amer. Ass. Hlth phys. Educ. (Suppl.)*, 1938, 9, No. 1, 37-48.—This is a summary of theses by C. M. Rice, L. H. Rice, M. S. Doupe, L. F. Gray, M. Shelby, D. R. Benson, D. E. Dunning, E. L. Martus, M. E. Morse, H. R. Sexton, R. R. Baird, A. E. Nolan, and M. C. Causey, all of Wellesley College. All deal to some extent with fundamental nerve and muscle physiology. Tests of reaction time, co-ordination, strength, and power are described; experiments are reported concerning the treppe phenomenon and conduction without decrement in narcotized nerve.—*F. W. Finger* (Brown).

1392. **Powell, E.** [Ed.] **Tests and analysis of general motor ability.** *Res. Quart. Amer. Ass. Hlth phys. Educ. (Suppl.)*, 1938, 9, No. 1, 49-56.—This is a summary of theses done at Wellesley College by D. M. Lensch, H. Parker, and J. H. Harris. A battery of tests of motor ability is described, paralleling for women the work of Cozens in the field of men's physical education.—*F. W. Finger* (Brown).

1393. **Powell, E.** [Ed.] **Problems related to motor ability.** *Res. Quart. Amer. Ass. Hlth phys. Educ. (Suppl.)*, 1938, 9, No. 1, 57-66.—This is a summary of theses by E. Halsey, H. Schleman, H. Reeder, V. Kling, G. Ihsan, Y.-M. Chen, M. Nevius, and L. Ellfeldt, of Wellesley College. Subjects treated include the relationship between certain "mental and physical traits," posture and motor and mental ability, physical capacity and athletic ability, musical talent and dancing capacity, rhythm and dilemma reaction time, the subcostal angle, and rhythm.—*F. W. Finger* (Brown).

1394. **Riemann, H.** **Die Unterschiede messbarer Merkmale bei Zwillingen im Vergleich mit den Unterschieden in der Bevölkerung.** (Differences in measurable traits in twins compared with differences in the population.) *Arch. Rass.- u. GesBiol.*, 1938, 32, 340-353.—Of all measurable traits, differences in bodily size and forehead breadth are the most strictly determined by heredity.—*P. L. Krieger* (Leipzig).

1395. **Russell, N., & Lange, E.** **Studies relating to achievement scales in physical education activities.** *Res. Quart. Amer. Ass. Hlth phys. Educ.*, 1938, 9, No. 4, 43-55.—This article describes the application of a battery of objective tests of skill to grading in physical education classes. Favorable reception by teachers and pupils, and co-operation among the departments of the school, marked the introduction of the system.—*F. W. Finger* (Brown).

1396. **St. George, M. W.** **Color preferences of college students with reference to chromatic pull, learning, and association.** *Amer. J. Psychol.*, 1938, 51, 714-716.—250 college students trained in color theory and practice and 250 untrained in such discrimination were asked to arrange 7 Milton Bradley colors in order of preference. From the results scales of affective preference were derived.

The order of preference was B, G, R, Y, O, V, W. Sex differences were slight. The scales of the art-trained and the untrained students were so similar that it was concluded that art training plays no active part in determining color preferences. Intropective reports indicated that associations with color were a common trend. Emotions commonly accompanied color experience, but color symbolism seemed uncommon.—*D. E. Johannsen* (Skidmore).

1397. **Schmid, B.** **Psychologische Beobachtungen und Versuche an einem jungen, männlichen Ameisenbären.** (Psychological observations and experiments with a young male anteater.) *Z. Tierpsychol.*, 1938, 2, 117-124.—Instinctive activities of the anteater could not be studied directly, since he could be observed only in captivity. His domestication was unusually rapid, and he became a very affectionate pet. He oriented himself without difficulty in the house as well as in the yard, his memory for places and people was good, and his learning ability dependable.—*P. L. Krieger* (Leipzig).

1398. **Sears, R. R.** **Effect of relative strengths of conflicting responses on mode of resolution of motor conflicts.** *Psychol. Bull.*, 1938, 35, 664.—Abstract.—*A. W. Melton* (Missouri).

1399. **Seashore, R. H., & Buxton, C. E.** **Factorial analysis of fine motor abilities.** *Psychol. Bull.*, 1938, 35, 674-675.—Abstract.—*A. W. Melton* (Missouri).

1400. **Seward, J. P., & Papanicolaou, G. N.** **The effect of androgenic hormone on activity in male and female guinea pigs.** *Psychol. Bull.*, 1938, 35, 666-667.—Abstract.—*A. W. Melton* (Missouri).

1401. **Sollenberger, R. T.** **The effect of male hormone on behavior with special reference to adolescence.** *Psychol. Bull.*, 1938, 35, 666.—Abstract.—*A. W. Melton* (Missouri).

1402. **Stratton, G. M., & Henry, F. M.** **Mongolians and Caucasians: their physiological reactions to emotional stimulus.** *Psychol. Bull.*, 1938, 35, 695.—Abstract.—*A. W. Melton* (Missouri).

1403. **Strauss, E.** **Vergleichende Beobachtungen über Verhaltensweisen von Rabenvögeln.** (Comparative observations of the behavior of birds of the raven family.) *Z. Tierpsychol.*, 1938, 2, 145-172.—The choice of food appears to be determined visually, while the birds observe with only one eye. They preferred glittering objects to variously colored ones. A young hooded crow showed the instinctive activity of hiding food in its entire evolution. This development began at the age of 6 weeks and was completed in 2½ weeks. Daws are less skillful and never cover up the food they are trying to hide. Bathing activities also passed through a process of development. Frequently the birds appeared to be undecided just before bathing or flying away. When sun bathing, they became entirely inattentive. Daws usually yawned when awakened from their sleep. Their moods were reflected in special postures and sounds, and were more easily transmitted among daws than among crows. Daws shook with disgust

when pecking in dung, while crows became highly irritated. Evidence was found also of behavior indicating opposition, attempts at making an impression, displeasure, and recognition.—*P. L. Krieger* (Leipzig).

1404. *Tomaszewski, W.* Puls- und Atmungs-frequenz unter psychischer Beeinflussung. (Pulse and breathing frequencies under psychic influence.) *Z. Kreisl Forsch.*, 1937, 29, 745-753.—The frequency of pulse beat and breathing were determined in 54 subjects under 12 different conditions, including mental work, emotional excitement, fearful expectation, etc. Sorrow and sad ideas decreased these frequencies, and they were increased by mental work, fright, joy, and expectation. Individual differences were great, and an after-effect was frequently observed.—*P. L. Krieger* (Leipzig).

1405. *Wendler, A. J.* A critical analysis of test elements used in physical education. *Res. Quart. Amer. Ass. Hlth phys. Educ.*, 1938, 9, No. 1, 64-76.—Using Thurstone's simplified multiple-factor method, 40 tests commonly employed in physical education were analyzed for their common and group components. Four underlying common factors were identified: strength, velocity or speed of movement, motor educability, and sensori-motor co-ordination. Combinations of items were set up which correlated well with each of the first three factors.—*F. W. Finger* (Brown).

1406. *Wettstone, E.* Tests for predicting potential ability in gymnastics and tumbling. *Res. Quart. Amer. Ass. Hlth phys. Educ.*, 1938, 9, No. 4, 115-125.—An attempt was made to measure in a group of athletes qualities thought to be necessary for success in gymnastics. On the basis of these data a battery was set up (thigh circumference/height, strength test, and the Burpee test), scores on which correlated .79 with eventual gymnastic ability. Because of the lack of higher correlation, it is suggested that the battery be used primarily for encouraging high scoring men to "try out," and not for discouraging those who score relatively low.—*F. W. Finger* (Brown).

1407. *White, M. M.* An experimental comparison of palmar conductance curves of learning, work, and rest. *Psychol. Bull.*, 1938, 35, 689.—Abstract.—*A. W. Melton* (Missouri).

1408. *Wild, M. R.* The behavior pattern of throwing and some observations concerning its course of development in children. *Res. Quart. Amer. Ass. Hlth phys. Educ.*, 1938, 9, No. 3, 20-24.—The basic pattern of throwing depends upon a co-ordination of neuromuscular powers, such as equilibration and orientation, and a highly sensitive proprioceptive mechanism. As the basic patterns develop, maturational factors are believed to be operative; individuation (including sex differences) seems to depend on learning, particularly that which occurs after six years of age.—*F. W. Finger* (Brown).

1409. *Wilkins, R. W., Newman, H. W., & Doupe, J.* The local sweat response to faradic stimulation. *Brain*, 1938, 61, 290-297.—A local sweat response to

faradic stimulation of the skin has been described. It depends on a local axon reflex mediated by the postganglionic sympathetic fibers. Many overlapping axon systems are involved.—*W. Marshall* (Appleton Clinic, Wis.).

1410. *Zeuner, H.* Zur Frage der zentralen Schaltung der Eigenreflexe der quergestreiften Muskeln. (The problem of the central control of the tendon reflexes of the striate muscles.) Berlin-Charlottenburg: Hoffmann, 1938. Pp. 17.—*R. R. Willoughby* (Brown).

[See also abstracts 1199, 1204, 1209, 1210, 1218, 1219, 1233, 1243, 1258, 1277, 1298, 1303, 1326, 1341, 1350, 1352, 1425, 1441, 1478, 1517, 1556, 1566, 1567, 1607, 1742, 1743, 1757.]

# PSYCHOANALYSIS, DREAMS, HYPNOSIS

1411. *Bresler, J.* Das Träumen als geistig-seelische Nachtarbeit. (Dreaming as psychological-spiritual night work.) Halle a.S.: Marhold, 1938. Pp. 60.—This is a collection of papers, previously published in the *Psychiatrisch-Neurologische Wochenschrift*, which are here brought together for the purpose of making them better accessible to the general public. Listed in order, they are: Bresler, J., Dreaming as psychological-spiritual night work; Lungwitz, H., Healthy and diseased dreaming; Grosskopf, E. v., Sleep and dreams; Hinrichsen, O., Concerning the problem of dreams as work; Stadelmann, H., The insomniac of today; Becker, W. H., A neurologist's experiences with the dream problem; Kaltenbach, —, Is dreaming psychological-spiritual night work? Carolsfeld, E. S. v., Dreaming as night work; Heun, E., Dreaming from the standpoint of life economy; Schwab, G., Dreaming as a psychophysical function and pathological manifestation.—*G. F. J. Lehner* (Vermont).

1412. *Friedlander, J. W., & Sarbin, T. R.* The depth of hypnosis. *J. abnorm. soc. Psychol.*, 1938, 33, 453-475.—A scale for measuring hypnotic depth consisting of four subtests of five units each was arbitrarily assembled from earlier scales. A standard method of trance induction was used on 57 volunteer men and women subjects. It was found that while the earlier scales are individually inadequate, they supplement each other when taken in combination. The new scale reveals a distribution of hypnotizability in which frequencies fall as scores rise. Retest hypnotic scores correlated with first-trial scores about .80, whether the hypnotist be the same individual in both trials or not. Slight but consistent sex differences in favor of women were shown with all scores. Correlation of hypnotic test scores of the subjects with their scores on several personality questionnaire variables revealed only "amiability" as possibly significant. Negative findings were reported for "self-sufficiency," "extraversion," "dominance," and "intelligence."—*C. H. Johnson* (Portland, Ore.).

1413. *Goodfellow, L. D.* A psychological interpretation of the results of the Zenith radio experi-



**ments in telepathy.** *J. exp. Psychol.*, 1938, **23**, 601-632.—"An analysis of over a million responses from the radio audience reveals the operation of marked extra-chance factors. The two most important of these factors are (1) the pattern or sequence used by individuals in recording their guesses, and (2) the set or predisposing influence of subtle suggestions found in the test instructions. When these factors are discounted, it becomes unnecessary to postulate telepathy to explain the results. The Zenith data resemble many of the data reported by telepathy exponents in that the results cannot be explained on the basis of chance. However . . . telepathy is not the only alternative even when such factors as sensory cues, errors due to recording methods, and the selection of favorable data are eliminated."—*H. W. Karn* (Pittsburgh).

**1414. Kellogg, C. E.** A note in reply to Mr. Charles E. Stuart. *J. abnorm. soc. Psychol.*, 1938, **33**, 521-526.—Corrections are made to statements by Stuart in his reply, in the January number of this Journal, to some of the author's criticisms of the quantitative techniques used in the extra-sensory perception researches.—*C. H. Johnson* (Portland, Ore.).

**1415. Leuba, C.** The influence of chance in extra-sensory perception. *Psychol. Bull.*, 1938, **35**, 648.—Abstract.—*A. W. Melton* (Missouri).

**1416. Newton, I.** A study of certain Leonard phenomena. *Proc. Soc. psych. Res., Lond.*, 1938, **45**, 103-126.—The writer presents a number of Leonard trance utterances and finds that insofar as they apply to her experiences they all refer to activities characterized by frustration. The hypothesis is offered that frustration experiences may somehow be more available, paranormally, to the medium.—*J. G. Pratt* (Duke).

**1417. Reymert, M. L., & Kohn, H. A.** An objective investigation of suggestibility. *Psychol. Bull.*, 1938, **35**, 683-684.—Abstract.—*A. W. Melton* (Missouri).

**1418. Rhine, J. B.** Extra-sensory perception. *Sigma Xi Quart.*, 1938, **26**, 170-174.—*R. R. Wiloughby* (Brown).

**1419. Rogosin, H.** Telepathy, psychical research, and modern psychology. *Phil. Sci.*, 1938, **5**, 472-483.—Recent developments in physics do not necessitate or justify a "new deal" in psychology. Neither do the experiments of Rhine and Thomas. "It would be more in accordance with scientific methodology to say that an improbable explanation of unusually high scores in guessing card faces, based on normal means of communication, is far superior to an explanation which postulates a supernatural means of cognition." The author maintains, indeed, that for one to regard the experiments at Duke University and elsewhere as proving the hypothesis of "extra-sensory perception" is indicative of a failure to understand the assumptions which underlie the philosophy of science. His conclusion is that "neither internal nor external evidence can support

the idea that a means of gaining knowledge without the use of the senses has been achieved."—*R. H. Dotterer* (Pennsylvania State College).

**1420. Weizsäcker, V. v.** Über Träume bei sogenannter endogener Magersucht. (Dreams in so-called endogenous craving for thinness.) *Dtsch. med. Wschr.*, 1937, **63**, 253-257; 294-297.—*P. L. Krieger* (Leipzig).

**1421. Woodard, J. W.** The relation of personality structure to the structure of culture. *Amer. sociol. Rev.*, 1938, **3**, 637-651.—The thesis that the super-ego is the consolidation of the structure of the culture into the structure of the personality is developed at length. A relation between the division of the personality into id, ego and super-ego, and the class structure of society is also discussed. The views of Freud and of Horney are evaluated. The paper is pointed toward the practical problems of developing a social order which will sustain personality integration rather than wrecking it.—*I. L. Child* (Yale).

[See also abstracts 1251, 1547, 1553, 1561, 1610, 1642.]

## FUNCTIONAL DISORDERS

**1422. Ackerman, N. W.** Paranoid state with delusions of injury by "black magic." *Bull. Menninger Clinic*, 1938, **2**, 118-126.—Psychological dynamisms involved in the genesis of the belief in magic are elucidated through a detailed analysis of the clinical data of a paranoid patient. The patient, a negro woman of 43 years, made an excellent social recovery after ten months of intensive psychotherapy. The unusual predominance of ideas of witchcraft and black magic had a sociological and racial source.—*W. A. Varvel* (Kansas).

**1423. Adams, E. H.** Psychiatry and protective work. *Ment. Hyg., N. Y.*, 1938, **22**, 625-633.—A study of the need of a psychiatric consultant in a public institution. This experiment was conducted at the Brooklyn Society for the Prevention of Cruelty to Children. It had no direct scientific purpose. Cases were studied as they came to the Society; no controls were used. There was difficulty in getting the persons to submit to examination in a mental clinic; appeal to a court was infrequent, but it was a good weapon when necessary. The psychiatric rather than the legal approach would be more effective in solving problems. Case histories are included.—*P. Brand* (New York City).

**1424. Adell, G.** Den psykiatriska undersökningen av vissa lösdrivare och alkoholister i Sverige år 1938. (The psychiatric investigation of certain vagrants and alcoholics in Sweden in 1938.) *Soc. med. Tidskr.*, 1938, **15**, 176-183.—This investigation of 120 incarcerated vagrants and alcoholics (aged 17-60) was conducted in 1938 at the request of the Swedish State Medical Board with a view to the revision of the 1885 vagrancy law. Family and social data were gathered from relatives, employers, teachers, and others. More than half were in-

tellectually inferior, 15% had signs of brain injury, only 15% were entirely free from sickness or deformities, one third had had gonorrhea, one sixth had had syphilis, about half showed signs of neuropathic constitutions in the forms of hyperhidrosis and vacillability; 16% were designated as hypo- and 10% as hypersexual; 24% were illegitimate. Of the fathers of the vagrants 14% were farmers. In regard to the homes from which they originated, 55% were designated as extremely poor, with insanity in 7½%, alcoholism in 22%, and criminality or vagrancy in 10%. These homes averaged 6.19 children per family, while the vagrants themselves had only .68 children. 7% of the vagrants were only children, 2½% were children of divorced parents, one third did not complete the required schooling (one fourth leaving school before 14 years of age and half before 18 years). 80% began alcoholic addiction before they were 20; 82% had been sentenced, on the average three times. The establishment of a special institution for vagrants is recommended.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

1425. Allen, C. The relation of the psyche to the endocrine glands. *J. ment. Sci.*, 1938, 84, 1091-1092.—Abstract.—*C. J. Herrick* (Pennsylvania).

1426. Allers, R. Réflexions sur la pathologie du conflit. (Reflections on the pathology of conflict.) *Etud. carmelit.*, 1938, 23, Part 1, 106-115.—The author discusses the resemblance between the mentality of "false humanism" (as found in Nietzsche, for example) and the mechanism of neurosis in general. In many cases of neurosis we find a revolt of the biological life against that of the spirit and its higher values.—*G. Goldman* (Sorbonne).

1427. Angyal, A. The concept of bionegativity. *Psychiatry*, 1938, 1, 303-307.—The statistical concept of abnormality is inadequate for psychiatric use, if only because averages also may be pathological. The difficulty for normative definitions lies in establishing legitimate standards. In this paper it is proposed to substitute for the concept of abnormality that of bionegativity. Bionegativity is defined as a personality constellation in which one or more part-processes, instead of promoting, impede or disturb the total function of the organism. What is abnormal statistically is likely to become bionegative.—*M. Grotjahn* (Chicago Institute for Psychoanalysis).

1428. Angyal, L. v., & Loránd, B. Beiträge zu den Zeichenstörungen autotopagnostisch-aphatischer Kranken. (A contribution on the drawing difficulties of autotopagnostic-aphatic patients.) *Arch. Psychiat. Nervenkr.*, 1938, 108, 493-516.—*P. L. Krieger* (Leipzig).

1429. Annau, D. Psychotherapeutic possibilities in organic disease. *J. ment. Sci.*, 1938, 84, 1089-1090.—Abstract.—*C. J. Herrick* (Pennsylvania).

1430. [Anon.] We examine the mental hospital. *Ment. Hyg., N. Y.*, 1938, 22, 437-446.—A discussion of the layout and therapy of a modern mental hospi-

tal by an ex-patient. The hospital is large, covering acres of land, and consists of a main building, cottages, gymnasia, workshops, studios, and greenhouses. The atmosphere is homelike, and the patient's days are planned with a view toward sustaining the feeling of a normal environment. By bringing about the co-operation and understanding of the patient's relatives and friends, the hospital not only prepares the individual for his environment, but also prepares the environment for the individual.—*P. Brand* (New York City).

1431. Bender, L., Curran, F., & Schilder, P. Organization of memory traces in the Korsakoff syndrome. *Arch. Neurol. Psychiat.*, Chicago, 1938, 39, 482-487.—These investigators studied 7 cases of the Korsakoff syndrome. The patients were requested to draw a pattern repeatedly. Patterns were not only changed in orientation on the background, but were completely reorganized. These changes may take place in perceptual as well as in memory patterns, and may represent reversion to a primitive type of organization in the perceptual field. They are the expression of strong field forces which have been liberated by the organic process. This syndrome shows a different type of organization comparable with organizations in childhood and, under special conditions, in the normal person.—*W. Marshall* (Appleton Clinic, Wis.).

1432. Bennett, A. E. Convulsive pentamethylene-tetrazol shock therapy in depressive psychoses. *Bull. Menninger Clinic*, 1938, 2, 97-100.—11 consecutive cases of chronic agitated and stuporous depressive psychosis were all relieved by metrazol shock therapy. 5 shock treatments, on the average, were given. The method is reasonably safe, even in older patients, but should be preceded by careful cardio-vascular examination and used only in well-equipped psychiatric departments.—*W. A. Varvel* (Kansas).

1433. Berendt, J. F. Katamnestische Betrachtung einiger Fälle von Übergangs-Psychosen aus dem manisch-depressiven in den schizophrenen Formenkreis. (Catamnestic observation of several cases of psychosis shifting from a manic-depressive to a schizophrenic form.) Königsberg: Raabe, 1937. Pp. 31.—*R. R. Willoughby* (Brown).

1434. Bigler, R. The development of psychiatric nursing. *Ment. Hyg., N. Y.*, 1938, 22, 447-453.—There is a great need for nurses in the psychiatric field. The method of training nurses for this field has been poor, so that few students have been attracted. Lower standards for entrance have been required than are required for the general-hospital schools of nursing. The teaching in most of these schools has not been good, and the social status of nurses in the psychiatric field has been very low, keeping many nurses away from positions in these hospitals. Also many nurses feel that there is a stigma or disgrace attached to those who nurse the mentally ill. There should be a carefully planned course for nurses who wish to specialize in the nursing

of mentally ill patients, and this should be built on a foundation of general education and experience plus the specific needs of a particular group of patients.—*P. Brand* (New York City).

1435. Boenheim, C. The scope of child psychotherapy. *J. ment. Sci.*, 1938, 84, 1059.—Abstract.—*C. J. Herrick* (Pennsylvania).

1436. Brown, J. F., & Orbison, W. D. A program for the experimental psychological investigation of convulsion therapy. *Bull. Menninger Clinic*, 1938, 2, 151-154.—More objective criteria for selecting cases with a good prognosis under metrazol therapy, for guiding treatment, and for evaluating results are needed. An experimental program to supplement clinical study is proposed. The test battery includes: (1) revised Stanford-Binet to check integrated problem-solving; (2) Rorschach test to give information on cognitive and perceptual processes; (3) modified Dembo technique to observe reactions to frustration; (4) Kohs block-design test modified to test the influence of success and failure on level of aspiration; (5) Luria's technique to determine specific complexes.—*W. A. Varvel* (Kansas).

1437. Brown, W. Psychological problems of the mature personality. *J. ment. Sci.*, 1938, 84, 1066-1067.—Abstract.—*C. J. Herrick* (Pennsylvania).

1438. Brown, W. T., Preu, P. W., & Sullivan, A. J. Ulcerative colitis and the personality. *Amer. J. Psychiat.*, 1938, 95, 407-420.—"A psychiatric study of nine unselected cases of ulcerative colitis revealed a personality type characterized by low energy endowment, emotional lability, anxiety, and a tendency to give up in the face of difficulties. . . . In personalities of this type emotional disturbances are important factors in precipitating attacks of ulcerative colitis."—*R. Goldman* (Boston Psychopathic Hospital).

1439. Buckley, A. C. Nursing mental and nervous diseases, from the viewpoints of biology, psychology and neurology. (5th ed.) Philadelphia: Lippincott, 1938. Pp. 329. \$3.00.—*R. R. Willoughby* (Brown).

1440. Cameron, N. A study of thinking in senile deterioration and schizophrenic disorganization. *Amer. J. Psychol.*, 1938, 51, 650-664.—The material of the present study was 4 incomplete sentences which the S's were required to finish; all involved causal relations, e.g., "I am in the hospital because . . ." 4 groups of S's were used: 22 senile patients, 25 schizophrenics, 29 normal children (CA 7-2 to 11-5), and 20 normal adults. The responses of both the psychotic groups were inferior to those of the children. In general, although the schizophrenics knew where they were, who E was, and when and where they were born, their use of language as an instrument of communication was inferior to that of the seniles, who retain their social orientation long after losing all other contact with reality. Particularly the seniles rarely exhibited the loose cluster-form of language organization (*asyndesis*) so characteristic of schizophrenics, and they were also much

more critical of their own performance.—*D. E. Johannsen* (Skidmore).

1441. Cammarata, J. A. Psychology in medicine. *Penn. med. J.*, 1938, 42, 31-34.—The author traces the relationship of the family physician to the members of the family, in that he serves as chief counselor. The topic of "mental life" is stressed. The author states that "the motivating forces of conduct are the instincts"; these are the unconscious causes for behavior. The topic of conflicts is discussed.—*W. Marshall* (Appleton Clinic, Wis.).

1442. Caprio, F. S. The morbidity incidence of degenerative somatic diseases in psychotics in comparison with the same type of disease in comparable age groups in civil life. *Amer. J. Psychiat.*, 1938, 95, 185-192.—Over a period of five years the morbidity incidence of degenerative diseases among psychotics was less than that of the same type of diseases in comparable age groups among non-psychotic patients in civil life. The hospitalized psychotic patient is spared the social and economic responsibilities that predispose to degenerative changes in the human body.—*R. Goldman* (Boston Psychopathic Hospital).

1443. Chassell, J. Limitations of suggestive psychotherapy. *Psychiatry*, 1938, 1, 309-316.—The true meaning of a neurotic symptom is by no means only what it manifestly seems; the symptom has a latent content like that of a dream. Unless we know something of this latent content psychotherapy will be limited. A detailed case history shows how far suggestive psychotherapy is able to deal with the latent content of the illness. It is probably more fruitful to look for repressed resentments and hostilities than for traumatic sexual experiences.—*M. Grotjahn* (Chicago Institute for Psychoanalysis).

1444. Cook, S. W. The production of "experimental neurosis" in the white rat. *Psychol. Bull.*, 1938, 35, 645.—Abstract.—*A. W. Melton* (Missouri).

1445. Dayton, N. A. Report of the division of mental deficiency. *A. R. Comm. ment. Dis., Mass.*, 1936. Pp. 41.—The following subjects are discussed in this report: (1) Traveling psychiatric school clinics. The primary reasons for cases being referred to the clinics are analyzed. Data of examinations are cited. Comparison between intellectual status on first examination and on re-examination is made, and related to comparisons in previous years when the work of these clinics was confined to children retarded three or more years. (2) Incidence of retardation. (3) Central registry for mental defectives. Type of contact reported is presented with data on age, IQ and sex. (4) Research in mental deficiency. (5) Publications. (6) Social service division. (7) Analysis of waiting lists of state schools. (8) Recommendations.—*N. R. Bartlett* (Brown).

1446. Delmond, J., & Carrère, J. Le syndrome psychologique dans les cas de perversité par encéphalite épidémique chronique à forme retardée. (The psychological syndrome in cases of perversity due to a chronic epidemic encephalitis developing



late.) *Ann. méd.-psychol.*, 1938, 96, Part 2, 401-411.

—Four cases are described in which many serious crimes (mostly sexual) had been committed by patients who were neurologically negative at the time but who later developed marked Parkinsonian syndromes. Psychologically they showed the following characteristics: (1) The patient repeatedly committed crimes. (2) The crimes, although committed in a stereotyped manner, became progressively more serious. (3) They are illogical, i.e., not in keeping with the previous personality. (4) They are scandalous even to the patient, who frequently confesses, as if to commit "indirect suicide." (5) They are directed against persons and society. (6) The patient may dissimulate or rationalize his acts. (7) He may show paradoxical affection, as in the patient who raped and killed a child but wrote a very tenderly affectionate letter to his mother about his little sister. (8) In the sexual sphere, the crimes are varied, often both homosexual and heterosexual. (9) The crimes are preceded by anxiety.—*M. B. Mitchell* (State University of Iowa).

1447. **Dimmick, G. B.** The mental efficiency of the narcotic drug addict. *Psychol. Bull.*, 1938, 35, 644-645.—Abstract.—*A. W. Melton* (Missouri).

1448. **Ebner, G.** Soziale Verhältnisse ehemaliger Hilfsschüler. (Social relationships of former special-school pupils.) Ochsenfurt a. M.: Fritz & Rappert, 1938. Pp. 31.—*R. R. Willoughby* (Brown).

1449. **Erickson, I.** The nursing care of chronic alcohol addiction. *Bull. Menninger Clinic*, 1938, 2, 113-117.—This article stresses the part the nurse plays in the treatment of chronic alcohol addiction, and the importance of understanding the emotional pattern of these patients in order to make therapy most effective.—*W. A. Varvel* (Kansas).

1450. **Erickson, I., & Ramsey, M.** Nursing care in shock therapy. *Bull. Menninger Clinic*, 1938, 2, 155-160.—Detailed instructions for the nurse assisting in shock therapy are given. A chart on which to record observations of the patient's behavior is included. Metrazol and insulin therapy are discussed separately.—*W. A. Varvel* (Kansas).

1451. **Ey, H., & Bonnafous-Sérieux, —.** Etudes cliniques et considérations nosographiques sur la "démence précoce." (Suite.) (Clinical studies and nosographic considerations on "dementia praecox." Cont.) *Ann. méd.-psychol.*, 1938, 96, Part 2, 360-394.—The authors discuss 128 cases of "dementia praecox" under seven different headings: (1) a deteriorating form characterized by disturbances of behavior; (2) a rapidly deteriorating form characterized by catatonia; (3) a rapidly deteriorating form with delusions; (4) a delusional deteriorating form following a long phase of dissociation; (5) delusions with schizophrenic evolution, without demential impairment; (6) a paraphrenic form without much loss of mental ability; and (7) schizopraxia (mostly behavior problems without much autistic activity). This article gives summaries of the cases under the last three headings and discusses all types. Bleuler's conception of schizophrenia characterized

by autism is common to all seven groups, but only the first three conform to Kraepelin's conception of dementia praecox.—*M. B. Mitchell* (State University of Iowa).

1452. **Faltlhauser, V.** Geisteskrankenpflege. Ein Lehr- und Handbuch für Irrenpfleger. (The care of the mentally ill. A textbook and manual for psychiatric nurses.) (4th ed.) Halle: Marhold, 1938. Pp. 142. RM 3.60.—*R. R. Willoughby* (Brown).

1453. **Faris, R. E. L., & Dunham, H. W.** Mental disorders in urban areas: an ecological study of schizophrenia and other psychoses. Chicago: Univ. Chicago Press, 1939. Pp. xxxviii + 270. \$2.50.—This study of 34,864 cases of mental disorder admitted to 4 state hospitals and 8 private sanitariums in Chicago during the period 1922-1934 by means of ecological mapping reveals a close relationship between insanity and the ecological structure of the city. The rates of incidence per 100,000 of population decrease steadily from 362 in the disorganized areas near the center of the city to 55.4 in the residential sections near the outskirts. Schizophrenia alone shows a similar distribution, but manic-depressive insanity is randomly distributed. Study of the sub-types of schizophrenia shows that the catatonic states come principally from the foreign-born and negro slum areas where poverty and culture conflict are combined, while the paranoid and hebephrenic types find their highest incidence in the rooming-house areas of the city where the primary group has broken down and individuals live in social isolation. High incidence of alcoholic psychoses and drug addiction is identified with zones of transition and poverty, and of general paralysis with "hobohemia" and rooming-house areas where there is a disproportion of the sexes and low income. Senile psychoses and psychosis with arteriosclerosis do not fit the ecological structure of the city so well as do the schizophrenic rates, but relatively high rates are found in the central slum and negro communities. A similar study of the incidence of mental disorder in Providence, R. I., confirms in general the findings in Chicago. Two chapters of interpretation are given, and 96 tables.—*J. McV. Hunt* (Brown).

1454. **Frede, M.** Über den sozialen Wert, die erbbiologischen Verhältnisse, Heiratshäufigkeit und Fruchtbarkeit von Schwachsinnigen. (The social value, inherited biological condition, frequency of marriage, and fertility of the feeble-minded.) *Erbarzt*, 1937, 4, 145-153.—This investigation covers former pupils of the Kiel school system, enrolled between 1902 and 1912.—*P. L. Krieger* (Leipzig).

1455. **Galdo, L.** La risonanza emotiva del delirio in psico-patologia e in medicina legale. (The emotional resonance of disfigurement in psychopathology and in forensic medicine.) *Arch. Antrop. crim.*, 1938, 58, 741-750.—Accidental or other disfigurement leads to an anxiety state proportional to the severity of the damage and to the individual's feelings of self-regard. Five case studies are discussed in considering the psychogenesis of this anxiety state, its effect on the ability to work,

and the relationship of the somatic to the psychic ego.—*C. J. Herrick* (Pennsylvania).

1456. Gaupp, R. *Les tendances du développement de la psychiatrie allemande*. (Tendencies in the development of German psychiatry). *Ann. méd.-psychol.*, 1938, 96, Part 2, 321-359.—German psychiatry through Kraepelin and Bleuler has been very much concerned with classification on a clinical psychological basis. When this was found to be very difficult, Kretschmer introduced his system of classification according to body structure. Since the law of July 14, 1933 requiring sterilization of manic-depressives, schizophrenics, epileptics, alcoholics, and certain criminals, much importance is attached to diagnosis and to research on heredity. A summary is given of the important German books on psychiatry, journals, schools, clinics, and hospitals.—*M. B. Mitchell* (State University of Iowa).

1457. Greene, J. E., & Phillips, W. S. *Racial and regional differences in standard therapy rates among seven clinical categories of white and negro mental patients in Georgia and the United States*. *Psychol. Bull.*, 1938, 35, 661.—Abstract.—*A. W. Melton* (Missouri).

1458. Grotjahn, M. *Psychiatric observations of schizophrenic patients during metrazol treatment*. *Bull. Menninger Clinic*, 1938, 2, 142-150.—The psychological reactions of 5 schizophrenics at various stages of metrazol treatment are described. The value of such observations in guiding treatment is discussed. Generalized combative negativism strongly indicates discontinuance and reassurance. Increased accessibility and responsiveness make possible psychotherapeutic communication. Metrazol treatment promises success only when combined with psychotherapy, but the latter must be conducted with considerable restraint.—*W. A. Varvel* (Kansas).

1459. Grotjahn, M. *Some features common to psychotherapy of psychotic patients and children*. *Psychiatry*, 1938, 1, 317-322.—Psychoanalytic treatment is based upon the use of transference and the interpretation of the patient's resistance. After a gradual removal of this resistance in the analysis the patient will activate three closely interwoven mechanisms of his cure: emotional abreaction, intellectual insight, and recollection of repressed happenings. Psychoanalysis is a method invented for the treatment of neurotic persons, and therefore must be modified for the treatment of psychotics and children. The first thing is to establish some kind of communication with the patient. The modern shock therapy tries to do the same by different means. Only after establishing communication is psychotherapy with psychotics and children possible. Both types of patients must be met on their own level, and the analyst must himself make a transitory regression.—*M. Grotjahn* (Chicago Institute for Psychoanalysis).

1460. Haas, M. *Über Geschlechtshäufigkeit, Jahreskurven und Beginn der Schizophrenie*. (The sex frequency, annual trend, and onset of schizophrenia.) *Arch. Psychiat. Nervenkr.*, 1938, 108, 552-561.—*R. R. Willoughby* (Brown).

1461. Hanfmann, E. *Picture completion in schizophrenia and in organic disorders*. *Psychol. Bull.*, 1938, 35, 647-648.—Abstract.—*A. W. Melton* (Missouri).

1462. Henry, G. W., & Gross, A. A. *Social factors in the case histories of one hundred underprivileged homosexuals*. *Ment. Hyg., N. Y.*, 1938, 22, 591-611.—The social and economic situation divides the homosexuals into privileged and underprivileged groups. In the underprivileged conflict with the law seems more pressing than with the secure, and drives the insecure into a more public search for gratification of their sexual drives. This group suffers from the handicap of poor social and economic beginnings, and is forced into a world of its own. For many the conflict between the homosexual world and the external world becomes too great and they become social liabilities. No means of dealing with the homosexual in this group has thus far been discovered.—*P. Brand* (New York City).

1463. Heyer, G. *The psycho-somatic unity—a few practical inferences*. *J. ment. Sci.*, 1938, 84, 1069-1071.—Abstract.—*C. J. Herrick* (Pennsylvania).

1464. Inghe, G. *Rättsspsykiatrisk praxis*. (Legal psychiatric practice.) *Svenska Läkartidn.*, 1938, 35, 1797-1810.—The writer has examined about 2000 legal psychiatric case testimonies (which have been gathered according to the new regulations in Sweden in the Criminological Central Archives since 1934) in order to find how the various clinics are applying the two special paragraphs in the Swedish criminal code which deal with treatment of psychiatric criminal cases. The finding of the investigation is that each of the leading clinics seems to apply these paragraphs differently by more or less systematically recommending differing kinds of treatment, thereby giving different interpretations of the two paragraphs.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

1465. Jacobowsky, B. *Till frågan om cardiazol-behandlingens verkningsätt*. (Concerning the problem of the effects of treatment with cardiazol.) *Svenska Läkartidn.*, 1938, 35, 1971-1975.—An investigation of 53 schizophrenics revealed that the treatment with cardiazol has the best effects with certain forms of atypical schizophrenia showing a definite trend toward periodicity.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

1466. Janet, P. *L'examen de conscience et les voix*. (The examination of conscience and the voices.) *Scientia, Milano*, 1938, 63, 263-278; 329-344.—Analyzing the delusions of persecution of a soldier, who for years had been in the habit of examining his conscience twice a day, Janet distinguishes between such elements in hallucination as take on the form of sensory experience, and another group of characteristics which reflect the impression made on the sick mind by negative social relationships. Dealing with the second group in particular Janet points to what might be called the projection of the man's scrutinizing attitude toward

himself on to hallucinatory "voices" coming from the outside. The voices, however, use words the man may have heard, but never uses himself. This transformation of language is instrumental in supporting the man's belief in the reality of his hallucinations, and brings about what Janet terms an "objectivation" of a felt social conflict.—*E. Franzen* (New York City).

1467. Jannoni Sebastianini, G. Osservazioni medicolegali sulle più comuni sindromi di nevrosi e pseudo-nevrosi post-traumatiche vere e simulate. (Medico-legal notes on the most common post-traumatic neurotic and pseudo-neurotic syndromes, with and without malingering.) *Arch. Antrop. crim.*, 1938, 58, 647-656.—Limiting himself to the relatively minor syndromes involving headaches, night fears, insomnia, and various phobias, which are frequent in both civil and criminal accident cases, the author points out that complaint of these subjective disturbances rarely comes immediately after the injury; that their severity is in proportion to the time interval; and that in general there is no relationship between the existence of such disturbances, the site of the injury, and its severity. The post-traumatic neurosis is in some cases an indemnity neurosis, in which mechanisms lying between the conscious and subconscious level cause a more or less automatic exaggeration of symptoms.—*C. J. Herrick* (Pennsylvania).

1468. Karl, R. Zur Entstehung der Trunksucht bei Frauen. Ein Beitrag. (The origin of alcoholism in women; a contribution.) Regensburg: (Erlangen Med. Diss.), 1938. Pp. 37.—*R. R. Willoughby* (Brown).

1469. Kephart, N. C. Group autonomy in a children's institution. *Ment. Hyg., N. Y.*, 1938, 22, 585-590.—An experiment at the Wayne County Training School to determine the training of high-grade mentally defective, delinquent children for social adjustment in the community. The Homestead Cottage was chosen for the experiment, and the 34 boys were selected on the basis of their behavior in the institution; they were older boys, but of approximately the same intelligence level as the entire school. The punishment for wrongdoing in this cottage was handled by the boys, and group disapproval was found to be very effective. It was discovered that the boys made a greater effort to conform to the group standards and earn the approval of the group in this cottage than was evident in any other cottage.—*P. Brand* (New York City).

1470. Knox, J. H. M., & Shirley, H. F. Mental-hygiene clinics in rural Maryland. *Ment. Hyg., N. Y.*, 1938, 22, 427-436.—Since 1934 mental-hygiene clinics have been held in rural Maryland with the co-operation of the Bureau of Child Hygiene of the State Department of Health. They are supported by schools, social agencies, and local health departments. The clinics have stimulated interest in the prevention and treatment of children's personality and adjustment problems and have also aided in the increasing of the state's facilities for the

care of handicapped children. During the first two years 967 patients were examined in these clinics. In 1936 63 clinics were held in 19 of the 23 counties of the state, and 469 persons were examined. The results showed that specialized service was needed.—*P. Brand* (New York City).

1471. Krafft, J. C. Present day problems in mentally deficient children. *Ill. med. J.*, 1938, 73, 428-429.—*J. Robertson* (Brown).

1472. Levy, D. M. "Release therapy" in young children. *Psychiatry*, 1938, 1, 387-390.—Release therapy or abreaction therapy is a treatment limited entirely to procedures in the office, and to cases in which the child is the primary consideration rather than the mother or other members of the family. The object of the therapist is to create a situation by the use of play methods in which the anxiety of the child is given expression. This treatment may be called a "specific release therapy." "General release therapy" is utilized typically when symptoms have arisen in the child because of the excessive demands or prohibitions made on him at too early an age. The test of its value is in the results achieved. Two case histories illustrate the theory and technique of the therapy. The younger the child the sooner can results be achieved.—*M. Grotjahn* (Chicago Institute for Psychoanalysis).

1473. Lindner, T. Den tionde internationella medicinska kongressen för psykoterapi i Oxford. (The 10th International Medical Congress for Psychotherapy at Oxford.) *Soc.-med. Tidskr.*, 1938, 15, 173-176.—For the first time at such a congress, the medical profession of England also participated. The writer's impression is that psychotherapy is now on its way to being closely associated with internal medicine, neurology, and psychiatry on the basis of medical psychology. As proof of the necessity for more extensive psychotherapy, it is mentioned that in England alone three million people, or one in every 14, are in need of it. The recent progress in Scandinavian countries is also mentioned.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

1474. Lowenfeld, M. The theory and use of play in the psychotherapy of childhood. *J. ment. Sci.*, 1938, 84, 1057-1058.—Abstract.—*C. J. Herrick* (Pennsylvania).

1475. Malzberg, B. Marriage rates among patients with mental disease. *Ment. Hyg., N. Y.*, 1938, 22, 634-644.—A study of marriage rates among the first admissions (aged 15 years and over) to all hospitals for mental diseases in New York State during the fiscal years 1929 to 1931 inclusive. The results showed that all first admissions as a group had lower marriage rates than the general population. Cerebral arteriosclerosis and manic-depressive psychosis are associated with lower marriage rates among the first admissions. Male first admissions with general paresis and alcoholic psychoses are associated with lower marriage rates than the general male population, but female first admissions are associated with higher marriage rates than the general



female population. The mental disease most effective in preventing marriage is dementia praecox.—*P. Brand* (New York City).

1476. *Mateer, F.* Illustrative techniques for differential diagnosis and the measurement of individual improvement. *Psychol. Bull.*, 1938, 35, 634.—Abstract.—*A. W. Melton* (Missouri).

1477. *McFarland, R. A., & Seitz, P. C.* A psychosomatic inventory. *J. appl. Psychol.*, 1938, 22, 327-339.—An inventory based upon complaints obtained from case histories and interviews of neurotic patients. The items were classified as physiological and psychological. Only items which differentiated between psychoneurotics and normals were included, and these were weighted on the basis of this differentiation. The inventory was administered to 250 patients and 716 college students. Significant differences were found between the scores of the normals and the neurotic patients.—*S. Roslow* (Psychological Corporation).

1478. *McGregor, H. G.* The emotional factor in visceral disease. New York: Oxford Univ. Press, 1938. Pp. 210. \$3.00.—*R. R. Willoughby* (Brown).

1479. *Menninger, W. C.* The treatment of chronic alcohol addiction. *Bull. Menninger Clinic*, 1938, 2, 101-112.—Chronic alcohol addiction is defined and various types are briefly discussed. Cases of acute intoxication and the alcoholic psychoses are excluded. Treatment is long and difficult. The most rational therapy involves hospitalization with opportunities for externalizing and sublimating aggressions, along with psychological help to gain insight and reconstruct the personality. The author discusses management of relatives, attitudes to be assumed toward the patient, activities, privileges and liberty, and psychotherapy.—*W. A. Varvel* (Kansas).

1480. *Menninger, W. C.* The results with metrazol as an adjunct therapy in schizophrenia and depressions. *Bull. Menninger Clinic*, 1938, 2, 129-141.—The psychiatric treatment of 26 schizophrenics was supplemented with metrazol injections. Results were less spectacular than those reported in the literature, with 1 recovered, 3 noticeably improved, 4 slightly improved, 7 unchanged. Increased accessibility to psychotherapy was reported. Convulsive treatment should be stopped when the patient's behavior and speech show a noticeable improvement. The use of metrazol in every case of early schizophrenia is not justified. Therapeutic effectiveness may be greater in depressions.—*W. A. Varvel* (Kansas).

1481. *Miller, E.* The importance of diagnosis and treatment of the disorders of adolescence. *J. ment. Sci.*, 1938, 84, 1072-1073.—Abstract.—*C. J. Herrick* (Pennsylvania).

1482. *Miller, N. E.* Psychological changes during treatment of clinical cases by administration of synthetic male hormone. *Psychol. Bull.*, 1938, 35, 665-666.—Abstract.—*A. W. Melton* (Missouri).

1483. *Möllmann, M.* Tagträumerei oder Wahnanknüpfung. (Daydreaming or incipient delusion.)

*M Schr. Psychiat. Neurol.*, 1938, 98, 1-20.—The daydreams of a sensitive 24-year-old girl are an example of a psychogenic reaction.—*P. L. Krieger* (Leipzig).

1484. *Momberg, K.* Der heutige Stand der Kenntnisse über den Mongolismus unter besonderer Berücksichtigung der innersekretorischen Störungen. (The present status of knowledge of mongolism, with special reference to disturbances of internal secretion.) Würzburg: Grasser, 1938. Pp. 22.—*R. R. Willoughby* (Brown).

1485. *Neugarten, H.* Psychotherapeutic re-orientation and religious re-birth. *J. ment. Sci.*, 1938, 84, 1084-1086.—Abstract.—*C. J. Herrick* (Pennsylvania).

1486. *Page, J., & Warkentin, J.* Masculinity and paranoia. *J. abnorm. soc. Psychol.*, 1938, 33, 527-531.—The Terman-Miles masculinity-femininity test was administered to 50 paranoid mental patients, and their scores were compared with those of male active and passive inverters and the general male population. No marked differences were noted with respect to word association, ink-blot association, general information, emotional and ethical responses, reaction to famous personalities, or belief in common sayings. In choice of occupations and books, and in likes and preferences, the paranoids were significantly less masculine than either the active inverters or the general male population, and significantly more masculine than the passive inverters. The data obtained seem to favor the hypothesis that paranoia is in some way related to passive homoeroticism.—*C. H. Johnson* (Portland, Ore.).

1487. *Parker, M. M.* The experimental use of drugs in psychopathology, past and future. *Psychol. Bull.*, 1938, 35, 634.—Abstract.—*A. W. Melton* (Missouri).

1488. *Patry, F. L.* Résumé of reports and discussions relative to the section on "school psychiatry" of the first international congress of child psychiatry, held in Paris in July, 1937. *J. juv. Res.*, 1938, 22, 183-197.—*F. M. Teagarden* (Pittsburgh).

1489. *Pollack, F.* Comments on hysteria. *J. ment. Sci.*, 1938, 84, 1083.—Abstract.—*C. J. Herrick* (Pennsylvania).

1490. *Proehl, E. A.* The transition from institutional to social adjustment. *Amer. sociol. Rev.*, 1938, 3, 534-540.—It is understood that mental hospital convalescents may recover to the point of satisfactory adjustment within the institution without being able to adjust successfully to a normal community; the latter involves additional problems. Factors influencing success in the transition from institutional to social adjustment are divided into endogenous (the prepsychotic personality of the patient and the nature of his psychosis) and exogenous (family reactions, the community, and habits of dependency resulting from prolonged hospitalization). Three cases involving transition problems are discussed briefly.—*I. L. Child* (Yale).

1491. Rodnick, E. H. The response of schizophrenic and normal subjects to stimulation of the autonomic nervous system. *Psychol. Bull.*, 1938, 35, 646.—Abstract.—A. W. Melton (Missouri).

1492. Rombouts, J. Psychotherapy and the development of personality. *J. ment. Sci.*, 1938, 84, 1062-1063.—Abstract.—C. J. Herrick (Pennsylvania).

1493. Rowland, H. Interaction processes in the state mental hospital. *Psychiatry*, 1938, 1, 323-337.—The paper tries to develop a practical method of research from the standpoint of direct observation and participation in the activities of the hospital. It also tries to give a systematic description of the more commonplace aspects of hospital life. The mental hospital is viewed as a miniature society. Some specific aspects of person-to-person interaction are given and the mental hospital is discussed from the standpoint of mass behavior.—M. Grotjahn (Chicago Institute for Psychoanalysis).

1494. Scatamacchia, E. Suicidio in un impulso motorio puro durante l'ebbrezza alcoolica. (Suicide from a purely motor impulse during alcoholic intoxication.) *Arch. Antrop. crim.*, 1938, 58, 530-537.—A case study of the suicide of a female chronic alcoholic illustrates the thesis that although alcoholism is more commonly connected with delirious, illusioned, hallucinated, and confusional states, followed by amnesia, it sometimes issues in motor compulsions, without loss of consciousness and accompanied by marked hypoalgesia.—C. J. Herrick (Pennsylvania).

1495. Scheller, H. Amnestische Aphasie, Wortblindheit und Störung des optischen Vorstellens. (Amnesic aphasia, word-blindness, and disturbance of visual imagery.) *Msschr. Psychiat. Neurol.*, 1938, 100, 33-91.—P. L. Krieger (Leipzig).

1496. Schott, E. L. Superior intelligence in patients with Frölich's syndrome. *J. appl. Psychol.*, 1938, 22, 395-399.—7 cases of boys exhibiting Frölich's syndrome but having high IQ's are reported. These IQ's, median 132, are in contrast to the findings of most other studies, in which mental retardation was associated with the syndrome.—S. Roslow (Psychological Corporation).

1497. Shakow, D. Schizophrenic and normal profiles of response to an auditory apperceptive test. *Psychol. Bull.*, 1938, 35, 647.—Abstract.—A. W. Melton (Missouri).

1498. Skalweit, W. Schizophrenie. (Schizophrenia.) *Fortschr. Neurol. Psychiat.*, 1938, 10, 533-550.—This is the first of two articles on the subject. The topics covered in this part are related mainly to the fields of pathophysiology and heredity. The author discusses recent contributions to the study of schizophrenia by analysis of changes in blood, circulation, and various pharmacological reactions. The question of inheritance of schizophrenia is closely bound up with the inheritance of constitution. The author believes that studies of schizophrenia will eventually show an organic basis

for the disease.—D. S. Oberlin (Delaware State Hospital).

1499. Slare, I. M. Mental nursing. Baltimore: Williams & Wilkins, 1938. Pp. 260. \$2.00.—R. R. Willoughby (Brown).

1500. Sprague, G. S. The psychiatrist's roles with his patients. *Amer. J. Psychiat.*, 1938, 95, 135-147.—The paper is offered in the belief that the attitudes and procedures of "psychotherapy" which every psychiatrist knows and uses ought to be set down in explicit statements. The tactics and roles of the psychiatrist and his therapeutic purposes are discussed. They range from active to passive, and their appropriateness varies with the patient's needs. They can be listed as: listener, target (object of patient's ideas and attitudes), indicator (of facts or topics needing closer attention), comforter, explainer, orienter, desensitizer, analyzer, interpreter of data, negotiator, etc.—R. Goldman (Boston Psychopathic Hospital).

1501. Stephen, K. The development of infantile anxiety in relation to frustration, aggression and fear. *J. ment. Sci.*, 1938, 84, 1068.—Abstract.—C. J. Herrick (Pennsylvania).

1502. Stogdill, R. M. Some behavior adjustment techniques in use with mentally retarded children. *J. excep. Child*, 1938, 5, 25-30; 45.—Revision of a paper read by the author before the Detroit Society of Neurology and Psychiatry, presenting the aims and technique of adjustive work in the Wayne County Training School at Northville, Michigan. An effort is made at the school to provide the unadjusted child with a stable and secure environment. Much of the time of the interviewer is devoted to the handling of problems of emotional worry and upset centering around the family from which the low-grade child comes. The author finds that the interview is the essential technique in all adjustment work with these children. Contrary to popular belief, many feeble-minded children have mental conflicts, and many of them respond readily to analytic procedures. A description is given of the "situational interview," in which to reduce a child's tension he is returned to the location where the problem occurred and there the interviewer talks the matter out with him and with some individual associated with the incident; it is found that such a procedure is an excellent tension-reducer. Much emphasis in the school is placed upon real-life solutions to problems and to the building of social habits.—L. A. Averill (Worcester Teachers College).

1503. Stokvis, B. Psychotherapy for patients with circulatory diseases. *J. ment. Sci.*, 1938, 84, 1081-1082.—Abstract.—C. J. Herrick (Pennsylvania).

1504. Thompson, W. H. A mongolian with superior attainment in the language arts. *Psychol. Bull.*, 1938, 35, 633.—Abstract.—A. W. Melton (Missouri).

1505. Ustvedt, H. J. Über die Untersuchung der musikalischen Funktionen bei Patienten mit Gehirn-

leiden, besonders bei Patienten mit Aphasie. (The investigation of musical functions in patients with brain diseases, especially in patients with aphasia.) *Acta med. scand.*, 1937, Suppl. Bd. 86. Pp. 737.—P. L. Krieger (Leipzig).

1506. Van der Hoop, J. Analytic and synthetic processes in the different phases of life. *J. ment. Sci.*, 1938, 84, 1060-1061.—Abstract.—C. J. Herrick (Pennsylvania).

1507. Völgyesi, F. Stage fright and neuroses in professional life. *J. ment. Sci.*, 1938, 84, 1078-1080.—Abstract.—C. J. Herrick (Pennsylvania).

1508. Wagner, P. S. A comparative study of negro and white admissions to the psychiatric pavilion of the Cincinnati general hospital. *Amer. J. Psychiat.*, 1938, 95, 167-183.—Objective available evidence indicates no innate hereditary difference between the negro and the white with respect to mentality, instinctual expression, or potential adaptability. If there are innate psychological qualities which differ from the white's, the negro will react differently to the same environment, because of a differing constitutional pattern. The colored population had an incidence of psychosis twice as great as the white; there was a marked preponderance of psychoses among negroes in all diagnostic groups except those occurring in later life. There is no evidence that psychoses among negroes offer any fundamentally different problems of etiology, diagnosis, psychotic manifestations, or prophylaxis from those of psychoses among white men.—R. Goldman (Boston Psychopathic Hospital).

1509. Wile, I. Open clinic treatment for problems of juvenile behaviour. *J. ment. Sci.*, 1938, 84, 1074-1075.—Abstract.—C. J. Herrick (Pennsylvania).

1510. Williams, H. W., & Rupp, C. Observations on confabulation. *Amer. J. Psychiat.*, 1938, 95, 395-405.—"The development of confabulation is dependent on the inter-reaction of several factors, among which are the retrogressive memory disturbance, more specifically the scope of that disturbance, a lack of insight, and a relatively intact personality structure which conforms to a more or less specific pattern. These factors vary in pathognomonic significance from case to case. Confabulation is to be distinguished from fabrication and phantasy expressions, is derived from actual experiences of the individuals, is made manifest by the dilemma the individual is confronted with."—R. Goldman (Boston Psychopathic Hospital).

1511. Wilson, A. The psychogenic factor in haematemesis. *J. ment. Sci.*, 1938, 84, 1087-1088.—Abstract.—C. J. Herrick (Pennsylvania).

1512. Wittman, P. A controlled study of the developmental and personality characteristics of chronic alcoholics. *Psychol. Bull.*, 1938, 35, 644.—Abstract.—A. W. Melton (Missouri).

[See also abstracts 1203, 1204, 1213, 1238, 1377, 1398, 1407, 1525, 1631, 1693, 1710, 1726, 1733, 1754.]

## PERSONALITY AND CHARACTER

1513. Abernethy, E. M. Dimensions of "introversion-extroversion." *J. Psychol.*, 1938, 6, 217-223.—An inventory consisting of 44 questions selected from standardized tests of introversion-extroversion was administered to 289 college students and 124 adults. The problem was to determine whether there actually exists the pronounced negative correlation commonly assumed between "liking thought" and "liking people." The results showed only slight antagonism between interest in social activities and interest in thought. The correlation between "liking thought" and "liking people" is negative but very low for the college students; for the adult subjects, college-trained, it is approximately zero.—J. McV. Hunt (Brown).

1514. Alexander, F., & others. Culture and personality, 1938 section meeting. *Amer. J. Orthopsychiat.*, 1938, 8, 587-626.—This is a series of papers presented by twelve prominent psychiatrists and sociologists at the 1938 section meeting of the American Orthopsychiatric Association. Franz Alexander presided as chairman. Discussions were concerned with such topics as "A Tentative Analysis of the Variables in Personality Development" (Franz Alexander), "Personality Formation in Social Context" (W. L. Warner), "Attitudes Toward Psychotics" (H. L. Witmer), the role of language in studying culture (H. S. Sullivan), and "Family Attitudes" (W. Healy).—S. W. Bijou (Delaware State Hospital).

1515. Bennett, G. K. A simplified scoring method for the Bernreuter personality inventory. *J. appl. Psychol.*, 1938, 22, 390-394.—The weights of the items in the two Flanagan scales of the Bernreuter personality inventory were reduced to 0, 1, and 2 instead of the present range from -7 to +7. 115 inventories were rescored by these simplified scales. The correlation between the original scoring and the simplified was .971 for F1-C and .983 for F2-S. New regression equations for determining the Bernreuter scores were computed. The multiple correlation coefficients between the obtained and estimated scores range from .889 to .965. A two-dimensional table was constructed permitting one to determine the four Bernreuter percentiles for any combination of simplified Flanagan scores. On another group of 100, the correlations between percentiles determined by the simplified and by the original methods were found to range from .883 to .951.—S. Roslow (Psychological Corporation).

1516. Bingham, W. V. Halo: its prevalence and nature in estimates of objective traits and in inferential trait-judgments. *Psychol. Bull.*, 1938, 35, 641.—Abstract.—A. W. Melton (Missouri).

1517. Bousfield, W. A. Further evidence of the relation of the euphoric attitude to sleep and exercise. *Psychol. Rec.*, 1938, 2, 334-344.—Progress has already been made in isolating the following two classes of correlates of the euphoric attitude: (1) descriptive facts which facilitate adequate defini-



tions, (2) antecedent agents which act as determinants of euphoria. On the basis of answers by college students to a questionnaire concerning the relationship between euphoria and schedules of sleep and exercise, conclusions justified the viewpoint that the euphoric attitude is a neuromuscular adjustment the determiners of which "include the regularity of adherence to temporally conditioned routine habits."—*P.S. de Q. Cabot* (Simmons).

1518. Crook, M. N. A further note on self-judgments of constancy in neuroticism scores. *J. soc. Psychol.*, 1938, 9, 485-487.—Following the administration of the Willoughby personality schedule to two sections of college psychology students (female), supplementary instructions were read, asking them to judge whether their personality had changed in a favorable (F), or an unfavorable (U) direction, or had shown no essential change (N). The estimates for the two sections combined were F, 49%; U, 5%; N, 46%. These data support the conclusion from an earlier experiment (see XI: 5777) that most people are unduly optimistic in estimating the trend of their personality development.—*E. D. Hunt* (Brown).

1519. Fisher, D. C. La confiance en soi. (Self-confidence.) (Trans. from the English by A. & R. Hugues.) Paris: Flammarion, 1938. Pp. 248. 18 fr.—Self-confidence, which is of prime importance in life, should be inculcated in early childhood. Initiative should be encouraged in all fields of endeavor, and the child should be given actual experience in the world as soon as possible. He should have real responsibilities, so that he may early learn to adapt to actual conditions of life.—*G. Goldman* (Sorbonne).

1520. Garrett, H. E. Differentiable mental traits. Bloomington, Indiana: Principia Press, 1938. Pp. 39.—The author analyzes data on mental traits on the basis of Thurstone's centroid method of factor analysis and finds that it is useful in test construction, investigating organization of abilities, and as a first step in defining and measuring common personality traits.—(Courtesy *J. educ. Res.*).

1521. Hayes, S. P., Jr. A note on personality and family position. *J. appl. Psychol.*, 1938, 22, 347-349.—The percentile scores on the Bernreuter personality inventory of 76 women students at Mount Holyoke College were compared with their family position. The numbers in each family position were too few to yield reliable differences. However, the consistency of the results and the agreement with earlier similar findings of Stagner and Katzoff are significant. The more older siblings a subject had, the more likely she was to be neurotic and the less likely to be self-sufficient and dominant. Also, having older siblings was associated with being more introverted, less self-confident, and more sociable.—*S. Roslow* (Psychological Corporation).

1522. Jarvie, L. L., & Johns, A. A. Does the Bernreuter personality inventory contribute to counseling? *Educ. Res. Bull.*, 1938, 17, 7-9.—The Rochester Athenaeum and Mechanics Institute used

the Bernreuter personality inventory from 1934 to 1936 in an attempt to establish the personality status of incoming students. Inventory scores were compared with counselors' interpretations of objectively observed student behavior. The latter included anecdotes of behavior, records of conferences with students, periodic summaries of behavior patterns, in some cases recommendations for remedial action, and employer's reaction to the student on the job. In 1934, coefficients of correlation ranged from  $-.15$  to  $.14$  (148 cases). In 1935, with a single-scale technique, coefficients of correlation ranged from  $.23$  to  $.40$  (216 cases), and in 1936 from  $-.14$  to  $.23$  (107 cases) with the same technique. It was concluded that the Bernreuter personality inventory offers little aid in the isolation of personality problems peculiar to that educational situation.—(Courtesy *Child Developm. Abstr.*).

1523. Karpf, M. J. Reliability of judgments of and by social workers. *Social Work Tech.*, 1938, 3, 219-229.—The author reviews experimental findings from the psychological literature showing judgments of personality and character to be highly unreliable.—*M. Keller* (Butler Hospital).

1524. Klemm, O. Gedanken über seelische Anpassung. (Thoughts concerning psychological adjustment.) *Arch. ges. Psychol.*, 1938, 100, 387-400.—This is part of the author's contribution to the symposium on adaptation of the International Congress of Psychology held in Paris in 1937. After considering the various usages of the terms adaptation and adjustment, the author discusses psychological adjustment as the response of the organism as a whole for the good of the whole, seeing in it one of the basic psychological phenomena. The use of this concept in various spheres of activity is illustrated by examples.—*G. F. J. Lehnert* (Vermont).

1525. Kraemer, M. Laxatives and bowel consciousness. *Amer. J. Dig. Dis.*, 1938, March, 9-12.—*J. Robertson* (Brown).

1526. Lawton, G. Are we ready for a behavior quotient? *Amer. J. Orthopsychiat.*, 1938, 8, 758-761.—What we refer to as human behavior is a combination of performance, motive, and physical change. Because of our limited scientific understanding of man, at the present time we measure only small segments of behavior. It is hoped that some day "we will be able to measure every significant human performance together with the particular motive accompanying it." When we can measure the effect of interrelations between performances and motives, only then can we be sure that we are measuring the true picture of personality.—*S. W. Bijou* (Delaware State Hospital).

1527. Lentz, T. F. Acquiescence as a factor in the measurement of personality. *Psychol. Bull.*, 1938, 35, 659.—Abstract.—*A. W. Melton* (Missouri).

1528. Margulies, M. Medizinische und psychologische Bemerkungen zum Grabbe-problem. (Medical and psychological remarks concerning the Grabbe problem.) *Ned. Tijdschr. Psychol.*, 1938,

6, 255-286.—A clinical analysis of the personality of the German poet Grabbe.—*H. Beaumont* (Kentucky).

1529. **Martin, H. W.** Effects of practice on judging various traits of individuals. *Psychol. Bull.*, 1938, 35, 690.—Abstract.—*A. W. Melton* (Missouri).

1530. **Ohm, A.** Die Entwicklung der sozialen Person während der Untersuchungshaft. (The development of the social personality during detention for questioning.) Leipzig: Barth, 1938. Pp. 60.—*R. R. Willoughby* (Brown).

1531. **Rickers-Ovsiankina, M.** Rorschach scoring samples. Worcester, Mass.: Worcester State Hospital, 1938. Pp. v + 177. \$3.00.—This includes examples of the scoring of responses to the Rorschach test compiled from the writings of Beck, Binder, Bleuler, Boss, Dubitscher, Gardner, Loepfe, Loosli-Usteri, Mueller, Munz, Oberholzer, Oeser, Rorschach, Veit, and Vernon. They are given without change except for the translation into English and the uniform use of the German scoring symbols.—*M. Keller* (Butler Hospital).

1532. **Roback, A. A.** The concept of character in a totalitarian-bound world. *J. Phil.*, 1938, 35, 676-677.—Abstract.—*R. R. Willoughby* (Brown).

1533. **Smith, M. E.** A comparison of the neurotic tendencies of students of different racial ancestry in Hawaii. *J. soc. Psychol.*, 1938, 9, 395-417.—College students of Hawaii, of different racial ancestry, when tested by the Thurstone personality schedule and an abbreviation of it, gave larger average scores than those obtained by Thurstone at the University of Chicago, showing a more neurotic group in Hawaii. Those of Korean and part-Hawaiian ancestry showed the highest average scores, Chinese and Portuguese next, with Japanese and other-Caucasians last; none of the differences in average scores between the races were large enough to be statistically significant. The Japanese and other-Caucasians, which average lowest, are the largest elements in the population and the ones with the most prestige.—*E. D. Hunt* (Brown).

1534. **Spencer, D.** Fulcra of conflict. A new approach to personality measurement. Yonkers-on-Hudson: World Book, 1938. Pp. xii + 306. \$2.50.—This volume describes a study of personality conflict by means of a paper-and-pencil questionnaire administered to high school students. The personality conflict is defined as "a degree of discrepancy or incongruity between an individual's self-report of his own characteristics and behaviors, and his comparable report on similar items in six parallel sections of the test which assume to measure certain subjective factors determining whether a given personality variable has meaning for conflict or complacency. These factors, termed for convenience the 'fulcra,' are the subject's ideals in regard to the behavior items (last section of the test), his father's ideals, his mother's ideals, his father's behavior, his mother's behavior, and the behavior of his closest associates." To insure honesty in the answers the

blanks were not signed by the subjects.—*S. Rosenzweig* (Worcester State Hospital).

1535. **Stisser, L.** Über Affekte, emotionale Objektion, Ganzheitsauffassung und Persönlichkeitsveranlagung. (Affects, emotional objectification, comprehension of totalities, and classification of personalities.) *Unter. Psychol. Phil.*, 1937, 13, No. 1. Pp. 91.—By means of a gramophone and special receiver the emotional effect of tones was measured at a constant frequency and increasing amplitudes, as well as in four other conditions. On the basis of the degree of fusion of successive impressions a personality classification is suggested.—*P. L. Krieger* (Leipzig).

1536. **Weber, C. O.** Function-fluctuation and personality trends of normal subjects. *Amer. J. Psychol.*, 1938, 51, 702-708.—"Five tests measuring a variety of capacities were administered to 44 college women of freshman grade on 6 occasions separated by intervals of one week. Test-retest variability was computed by means of a modification of Hunt's formula, and the resulting V scores were studied in relation to personality test scores. (1) Ss of high intelligence score are more variable than those of low intelligence, but the difference is un-reliably small. (2) Reliably high variability differences were found in ascendant as compared with submissive Ss (Allport Test). (3) The variability of Ss having low emotionality score was reliably higher than for those having high emotionality score (Guilford Test). (4) The findings are related to the previous studies of Gatewood, Guilford, and Hunt showing that schizophrenic patients are characterized by a high day to day variability of capacity."—*D. E. Johannsen* (Skidmore).

1537. **Wellek, A.** Typus und Struktur. (Type and structure.) *Arch. ges. Psychol.*, 1938, 100, 465-477.—The author presents a critical discussion of the uses of the terms "type" and "typical," pointing out that the term "type" is a structural-theoretical concept which implies certain dimensions, the concept of an anti-type (*Gegentyp*), a mixed type (*Mischtyp*), an ideal type, a real type, etc. These types are considered in relation to the views of Kretschmer, Jaensch, Jung, etc.—*G. F. J. Lehner* (Vermont).

[See also abstracts 1166, 1197, 1317, 1323, 1327, 1421, 1438, 1483, 1486, 1492, 1512, 1570, 1601, 1628, 1635, 1669, 1679, 1712, 1728, 1740, 1760.]

## GENERAL SOCIAL PROCESSES

(incl. Esthetics)

1538. **Allport, F. H.** Occupational and societal roles studied with relation to the human behavior pattern. *Psychol. Bull.*, 1938, 35, 693-694.—Abstract.—*A. W. Melton* (Missouri).

1539. **Ayau, A. E.** The social psychology of hunger and sex. Cambridge, Mass.: Sci-Art Publ., 1938. Pp. 160.—The author inquires into the

sociological bases of the chief wants, notably sex and hunger, and the various conditions and circumstances of their appeasement in our present society. He finds 40% of marriages to be failures and 40% additional neither successes nor failures, and places the blame for these conditions on the socio-economic organization of society, the subordination of sex to hunger being the basic cause of marital failure, masturbation, prostitution, contraception, etc. He finds the possession of great luck the most certain key to financial success. The probability of the average man receiving sums in excess of \$3000 annually is practically non-existent. Human nature is found to be made up of four elements: constitution, desire, intelligence, and ideology. Brief chapters are included on character and personality, individual differences, and intelligence, each considered primarily in its behavioral aspects.—*L. A. Averill* (Worcester Teachers College).

1540. **Berglin, C.** "Det allmänna rättsmedvetandets" fantasiliv. (The fantasy life of "the general consciousness of right.") *Svenska Läkartidn.*, 1938, 35, 1672-1676.—Having been asked as a prison physician by relatives of prisoners to distribute magazines to the inmates, the writer generally declined on the basis that such literature was not regarded as suitable. In order to verify his point of view, he undertook a systematic investigation of a great number of magazines which contained novels and short stories. He found, among other things, that in 117 such magazine stories the subjects were: murder 8, attempted murder 2, suicide 1, mistreatment 9, mistreatment of animals 1, robbery 7, blackmail 2, fraud 7, counterfeiting 1, embezzlement 1, perjury 1, white slavery 1, escape from prison 1, fatal disaster 3, incorrect diagnosis resulting in death 1, adventures dangerous to life 4, sport 4, superstition 5, general stories 3, travelogue 5, science 2, psychology 5, biography 4, movies 5, beauty culture 2, love stories 21, moral 4, jokes 7. Short abstracts of some representative stories are included. The writer states that it is futile to try to find basis in the instinctive tendencies of the masses for social upbuilding.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

1541. **Bernard, L. L.** The unilateral elements in magic theory and performance. *Amer. sociol. Rev.*, 1938, 3, 771-785.—*I. L. Child* (Yale).

1542. **Bierstedt, R.** The means-end schema in sociological theory. *Amer. sociol. Rev.*, 1938, 3, 665-671.—The voluntaristic or means-end concepts that are gaining vogue in sociology are criticized on the general grounds that they violate most of the criteria of objective scientific methodology. If such concepts could be translated into terms which have empirical reference, if for example ends could be identified with psychological motivations or physiological drives or organic needs, we might be advanced on the road to understanding social meanings, values and relationships.—*I. L. Child* (Yale).

1543. **Bryngelson, B.** Psychologic factors in the management of the exceptional child. *J. excep.*

*Child*, 1938, 5, 65-67.—Problems of the stutterer are discussed. It is suggested that tonic or clonic interruptions of the breath stream are due to involuntary functioning of the nervous system, and hence nothing can be done correctively. Personality deviations that characterize the stutterer may, however, be mitigated by sane teaching in which the inadequate speaker is not made overconscious of his peculiarity and asocial defenses. The teacher should aid the poor speaker to envisage his difficulties objectively, and to make common-sense adjustments to his limitations.—*L. A. Averill* (Worcester Teachers College).

1544. **Caldwell, M. G.** The sociological tract: the spatial distribution of social data (a selected annotated bibliography). *Psychiatry*, 1938, 1, 379-385.—The purpose of this investigation is to provide a source of material related to ecological studies of factors and conditions involved in or associated with mental health problems. It is designed to help workers interested in employing the ecological method of research in their fields.—*M. Grotjahn* (Chicago Institute for Psychoanalysis).

1545. **Canady, H. G.** Sex differences in intelligence among negro college freshmen. *J. appl. Psychol.*, 1938, 22, 437-439.—The A.C.E. psychological examination was administered to 637 men and 669 women at West Virginia State College from 1931 to 1937. The total scores revealed no significant sex difference in terms of range, highest and lowest scores, means, medians, standard deviations, or variability. In the sub-tests, the men were significantly superior in completion and arithmetic, and the women in artificial language.—*S. Roslow* (Psychological Corporation).

1546. **Carhart, R.** Evolution of the speech mechanism. *Quart. J. Speech*, 1938, 24, 557-568.—A brief discussion and a summary in tabular form of the evolution of the peripheral organs of speech, the ear, and the cerebral areas most important in speech, from the jawless fishes to man.—*W. H. Wilke* (New York University).

1547. **Casey, R. P.** The psychoanalytic study of religion. *J. abnorm. soc. Psychol.*, 1938, 33, 437-452.—Religion obviously presents a rich field for the application of psychoanalytic principles. The spontaneous growth of much religion, the primitive character of its attitudes and emotions, its frequently successful defiance of reason as a controlling element in life, and its production of explanations and pictorial representations of cosmic sweep, all are symptomatic of an area in human life in which the deeper unconscious forces have free and powerful play. Psychoanalysis has been successful in pointing out many of the ways in which unconscious impulses and patterns are operative in theology, piety, and cult; yet in attacking historical problems it has often been handicapped by obvious ignorance of the factors or by defective perspective. The most obvious projected impulses satisfied through religious expression are protection against danger, protection against bad luck, protection against the sense of



loneliness and indifference in life, and protection against the sense of guilt in all its manifold forms. Future problems for psychoanalysis are guilt, determination of the correlation between psychoses and religious experiences, and religion as the handmaiden of symptoms.—*C. H. Johnson* (Portland, Ore.).

1548. Chapin, F. S. **Design for social experiments.** *Amer. sociol. Rev.*, 1938, 3, 786-800.—The author attempts "to describe briefly the efforts made to adapt the experimental method of physical science to the study of cause and effect or functional relationships in the social field." Problems of measuring and of controlling variables are discussed in relation to three social experiments which have been carried out by Dodd, Christiansen, and Mandel; these three experiments deal respectively with the effects of hygienic education upon hygienic practices, the relation of school progress to subsequent economic adjustment, and the relation between duration of Boy Scout tenure and subsequent participation in community activities.—*I. L. Child* (Yale).

1549. Charles, E. **Differential fertility.** *Sociol. Rev.*, 1937, 29, No. 3.—*R. R. Willoughby* (Brown).

1550. Cressey, P. G. **The motion picture experience as modified by social background and personality.** *Amer. sociol. Rev.*, 1938, 3, 516-525.—Discussion of the role of the motion picture in our social life has been confused by the tendency to look for simple, isolated cause-and-effect relationships. As a necessary preliminary to effective research in this subject, the author attempts to describe the general nature of the motion picture experience. Its significance as a psychological experience may be described in terms of projection, introjection, and displacement as three modes of identification; various degrees of correspondence may obtain between the cinema experience and the related reality experiences. Such descriptions can be optimally meaningful only if related to the whole experience of individuals, and to differences in personality and social backgrounds. "To ascertain the cinema's 'net contribution' to personality or community and to develop an adequate frame of reference for conceptualizing it will require further study of concrete community situations in which sufficiently complete data are available."—*I. L. Child* (Yale).

1551. Currier, F. P. **Certain reading disabilities as related to speech.** *Mich. St. med. Soc. J.*, 1938, 37, 414-419.—*J. Robertson* (Brown).

1552. Davis, E. A. **Basic English in the speech of American children.** *Sch. & Soc.*, 1938, 48, 665-668.—*C. K. Ogden* claims that more than 600 of the 850 words in his system of Basic English are constantly used by children of six. To test this claim the actual remarks of 436 representative American children (aged  $5\frac{1}{2}$  to  $9\frac{1}{2}$ ) in a standardized situation were recorded. Only 478 of his words were used, the discrepancy being greatest in "general names of things" and least in "operations." Many of the general names were used as verbs. One half of his qualifiers were used. "40% of the remarks were in

Basic, 80% of the total words used were on the Basic list, and slightly more than 70% of the different words were Basic." There is a slight negative relationship between the percent of remarks in Basic and scores on intelligence tests. 38 non-Basic words which were used more than a hundred times are listed. Many of these appear in Aiken's Little English, which is a more flexible system. It is probable that foreign adults can construct the framework of the language using Basic, and then, like the children, will use more forceful short cuts which Ogden might well recognize.—*M. Lee* (Chicago).

1553. Dollard, J. **The life history in community studies.** *Amer. sociol. Rev.*, 1938, 3, 724-737.—Extracts from a psychoanalytic record are used to show how life history data may be analyzed from the sociological point of view and how they may make a contribution to the study of community life.—*I. L. Child* (Yale).

1554. Ferguson, L. W. **Correlates of marital happiness.** *J. Psychol.*, 1938, 6, 285-294.—The data presented in G. V. Hamilton's *A Research in Marriage* are subjected to a critical analysis. Of the 17 conclusions which are considered in this article, 5 are statistically confirmed, but 12 are not. 25 of the relationships upon which he collected data were not commented upon by Hamilton, but 11 of these bear significant relationships to marital satisfaction. The author points out that when a particular conclusion of Hamilton's lacks statistical significance, it is not to be inferred that the conclusion has no value as a working hypothesis in psychiatry; and conversely, those relationships shown to be statistically significant are not in every instance important psychiatrically.—*E. D. Hunt* (Brown).

1555. Ford, C. S. **The role of a Fijian chief.** *Amer. sociol. Rev.*, 1938, 3, 541-550.—*I. L. Child* (Yale).

1556. Garth, T. R., Moses, M. R., & Anthony, C. N. **The color preferences of East Indians.** *Amer. J. Psychol.*, 1938, 51, 709-713.—647 boys and 431 girls in grades I to XII in Bijnor, India, arranged 7 Milton Bradley colors in order of preference. Ages could not be definitely determined, but seemed to range between 5 and 26 years. The results were treated by the order-of-merit method and the following scale of preference derived: W = 0; Y = 95; O = 160; V = 167; B = 189; G = 204; R = 230. A scale similarly derived for 1000 American whites gave: W = 0; Y = 69; O = 100; V = 107; B = 204; G = 126; R = 122. Sex differences were slight. The difference between the Indians and the whites was greater for the younger than for the older age groups; it is suggested that it is the result of nultural factors.—*D. E. Johannsen* (Skidmore).

1557. Hall, C. W. **Social prestige values of a selected group of occupations.** *Psychol. Bull.*, 1938, 35, 696.—Abstract.—*A. W. Melton* (Missouri).

1558. Hattingberg, H. **Love as a process of maturation.** *J. ment. Sci.*, 1938, 84, 1076-1077.—Abstract.—*C. J. Herrick* (Pennsylvania).

1559. Heidler, J. B., & Lehman, H. C. Chronological age and productivity in various types of literature. *Engl. J.*, 1937, 26, 294-304.—Evidence was sought on the age at which men are most likely to produce different types of literature. Only writings of authors who are deceased were used, since future performance cannot be predicted for those still living. The curves showing average numbers of literary works of French, English, German, and American authors, in each five-year period of their chronological age, revealed striking similarity in that they all rise more rapidly than they descend, nearly maximum height is maintained for approximately ten years, and the curve descends at about the same time. Conclusions drawn about periods of greatest productivity of 29 types of literature are summarized in tables. These show that the median ages of authors vary from 27.9 years for pastoral poetry to 52.5 years for scientific prose. The peak of great poetry, then, is before 30 years, prose fiction before 40 years, while such forms as philosophical discourses, history, critiques, and biographies tend to be produced after 50 years of age. For 15 out of 24 types of creative writing the peak is reached before 50 years of age. No specific boundaries can be set for any one type of writing, due to individual differences and brilliant exceptions. Younger men show a greater variety of creative writing. Motivation varies more than ability.—D. Bailey (Mary Baldwin).

1560. Hopfner, T. Das Sexualleben der Griechen und Römer von den Anfängen bis ins 6. Jahrhundert nach Christus. Bd. 1, Hälfte 1. (The sexual life of the Greeks and Romans from the beginnings to the sixth century A.D. Vol. 1, Part I.) Prague: Calve in Komm., 1938. Pp. 455.—R. R. Willoughby (Brown).

1561. Hopkins, P. The psychology of social movements: a psycho-analytic view of society. London: Allen & Unwin, 1938. Pp. 284. 10/6.—R. R. Willoughby (Brown).

1562. Janney, J. E. A quantitative study of fad and fashion leadership among undergraduate women. *Psychol. Bull.*, 1938, 35, 696.—Abstract.—A. W. Melton (Missouri).

1563. Jerome, E. K., & Steer, M. D. Speech correction facilities in colleges and universities of Indiana. *Quart. J. Speech*, 1938, 24, 609-612.—Returns from a questionnaire indicate that although 85% of the replies favor the treatment of speech-defective students at the college level, 80% do not have a speech clinic and only one institution is carrying on research in this field.—W. H. Wilke (New York University).

1564. Johnson, W. A statistical evaluation of specified cues related to the moment of stuttering. *Psychol. Bull.*, 1938, 35, 632.—Abstract.—A. W. Melton (Missouri).

1565. Kingsley, H. L., & Carbone, M. Attitudes of Italian-Americans toward race prejudice. *J. abnorm. soc. Psychol.*, 1938, 33, 532-537.—162 Italians and Italian-Americans were asked whether

they had ever felt that they had been treated as inferior or discriminated against because of their Italian nationality. 57% stated that they had experienced discrimination, the most common form being "calling names." Anger, resentment, and hate were the most common forms of emotional reaction. Adolescent boys, more than girls, reported a continuation of discrimination, but in the adult group women seem to continue to feel discriminated against more than men. Widely differing reasons were given as the cause of racial prejudice. The evidence of felt racial discrimination is about the same for American-born Italians as for foreign-born Italians.—C. H. Johnson (Portland, Ore.).

1566. Klineberg, O. Emotional expression in Chinese literature. *J. abnorm. soc. Psychol.*, 1938, 33, 517-520.—Although there are many similarities between literary descriptions of the emotions in China and in the West, there are also important differences which must be recognized if Chinese literature is to be read intelligently. Anger is described by expressions connected with "round eyes," "staring," "a chilly smile." "He scratched his ears and cheeks" means happiness. "He clapped his hands" indicates worry or disappointment. Many other examples are given.—C. H. Johnson (Portland, Ore.).

1567. Kopp, G. A. Metabolic studies of stutterers: I. Biochemical study of blood composition. *Speech Monogr.*, 1934, 1, 117-132.—Blood samples from 23 normal speakers and 49 stutterers were analyzed chemically to determine whether or not there were differences in the chemical composition for the two groups of subjects. Reliable differences of two kinds are reported: (1) "those differences of quantity of the various substances analyzed; and (2) the differences that exist in the manner in which these various substances are associated with each other." Differences in quantities of blood serum calcium, inorganic phosphates, potassium, protein, globulin, and sugar, as well as variation in the "blood pattern," justify the conclusion that "stuttering is a manifestation of a disturbed metabolism." The author expresses the hope that it will be possible, with more detailed knowledge, to control stuttering by dietary regulation of metabolism.—C. V. Hudgins (Clarke School).

1568. Kornhauser, A. W. Attitudes of different economic groups. *Psychol. Bull.*, 1938, 35, 663.—Abstract.—A. W. Melton (Missouri).

1569. Lehman, H. C. Chronological age and several types of leadership. *Psychol. Bull.*, 1938, 35, 684-685.—Abstract.—A. W. Melton (Missouri).

1570. Lentz, T. F. Generality and specificity of conservatism-radicalism. *J. educ. Psychol.*, 1938, 29, 540-546.—The author studies the intercorrelation of conservatism-radicalism scores obtained from the education, religion, government, sex, non-social and general items of the C-R opinionnaire. Although there is nothing in the data that precludes the possibility of the development of tests of different phases

of conservatism, the median  $r$  of .73 between the groups of items listed above argues for the validity of the concept of general conservatism.—A. W. Melton (Missouri).

1571. Lin, M. H. **Antistatism. I. Psychiatry**, 1938, 1, 391-417.—The essay presupposes both the fact and the idea of the state. A state is a territorial human society which exercises through a government supreme power over individuals and groups for the purpose of maintaining a general hierarchy of social values and conditions. Antistatism is a theory which rejects the historic state. Five great antistate systems are described and analyzed: the Taoist, the Cynic-Stoic, the liberal, the communist, and the anarchist. Finally the psychological conditions of antistatism are given and four main forms of anti-state reaction are discussed.—M. Grotjahn (Chicago Institute for Psychoanalysis).

1572. Lindsley, C. F. **The psycho-physical determinants of voice quality**. *Speech Monogr.*, 1934, 1, 79-116.—The paper consists of a series of studies designed to determine the nature of vocal resonance. By means of an electrical stethoscope the degree and frequency of vibration of the several resonating parts of the speech mechanism were recorded and studied. Records were obtained from the chest walls, the walls of the larynx, the pharynx, the sinuses, the head, and other bony structures. The experimental data are not presented in detail; the author summarizes his findings and gives his conclusions after each separate experiment. A final section summarizes the group of experiments.—C. V. Hudgins (Clarke School).

1573. Linton, R. **Culture, society, and the individual**. *J. abnorm. soc. Psychol.*, 1938, 33, 425-436.—The thing which influences any given person is not culture in general but a particular culture. The individual is never familiar with the whole of the culture in which he participates, or conscious of it as a distinct entity. He takes its attitudes and values and even its behavior stereotypes completely for granted. A society may be defined as any group of persons who have learned to live and work together. The patterns of organization of all societies begin with the division of the entire group into certain age-sex categories and the assignment of particular activities to each. A society is an organized aggregation of persons, whereas a culture is an organized aggregation of ideas and attitudes. Culture insures the existence and continuity of society by providing the society's members with adequate techniques for group living and for the satisfaction of their individual wants. Conversely, the members of the society perpetuate the culture by training each succeeding generation to its behavior patterns and values. It is the individual's place in society which is the dominant factor in determining his relation to culture as regards both knowledge and behavior.—C. H. Johnson (Portland, Ore.).

1574. Manig, H. **Über die Häufigkeit von Sprachstörungen bei schulpflichtigen Kindern und die Massnahmen zu ihrer Behandlung in schulischen**

**Sondereinrichtungen**. (The prevalence of speech defects among school children and their treatment in special institutions connected with the school system.) *Dtsch. Sonderschule*, 1938, 5, 671-680.—The percentage of stutterers among 10,000 school children in Hamburg increased from 1.24 in the first to 1.66 in the eighth grade, while in the same years lisping decreased from 15.4 to 6.3%. Usually stuttering is cured later by the children themselves, but lisping is difficult to overcome.—P. L. Krieger (Leipzig).

1575. Marshall, T. H. **Authority and the family**. *Sociol. Rev.*, 1937, 29, No. 1.—R. R. Willoughby (Brown).

1576. Marta-Vié, I. **Le bégaiement**. (Stuttering.) *Rev. méd.-soc. Enfance*, 1937, 5, 161-167.—The author analyzes the physical and psychological states of the stutterer and discusses the different therapeutic measures to be used according to the findings.—G. Goldman (Sorbonne).

1577. Matthews, M. V., Newlyn, D. A., & Penrose, L. S. **A survey of mental ability in a rural community**. *Sociol. Rev.*, 1937, 29, No. 1.—R. R. Willoughby (Brown).

1578. McGregor, D. **A study of public opinion among a group of industrial workers**. *Psychol. Bull.*, 1938, 35, 650-651.—Abstract.—A. W. Melton (Missouri).

1579. Merton, R. K. **Social structure and Anomie**. *Amer. sociol. Rev.*, 1938, 3, 672-682.—The author abstracts for consideration two aspects of social structure: culturally defined goals, and culturally approved means of attaining these goals. A particular society or particular individual may emphasize, or may accept or reject, either ends or means or both. Five types of individual reaction to social structure (conformity, innovation, ritualism, retreatism, and rebellion) are discussed in terms of this scheme, with illustrations drawn from economic behavior in our society. It is suggested that a number of related problems in sociology might profitably be subjected to similar analysis.—I. L. Child (Yale).

1580. Millson, W. A. D. **A review of research in audience reaction. II**. *Quart. J. Speech*, 1938, 24, 655-672.—A reply to criticisms of Millson's research with the Woodward ballot made by Henrikson (see XII: 3070).—W. H. Wilke (New York University).

1581. Mosier, C. I. **An example of quantitative method in social psychology**. *Psychol. Bull.*, 1938, 35, 697.—Abstract.—A. W. Melton (Missouri).

1582. Moss, F. K., & Luckiesh, M. **Visibility and readability of print on white and tinted papers**. *Sight-saving Rev.*, 1938, 8, 123-134.—This article is an account of an experimental approach to check the validity of claims of superiority of tinted over white paper. Readability is defined as "that characteristic which determines the speed, accuracy and ease with which printed or written matter may be read." Speed, ease of reading and frequency of the wink reflex were the measures employed. Ten samples of



paper were used to test visibility; three whites with varied surfaces; a light blue-green; a reddish buff; a fairly saturated yellow; a slight cream tint; light yellowish-green; deep cream; and fairly saturated yellowish-red. For testing speed and blink reflex only four colors, white, deep cream, fairly saturated yellow, and fairly saturated yellowish-red, were used. The cream-tinted was slightly superior to the white in relative visibility and frequency of blinking, but inferior in speed. The differences were of slight statistical significance, and the authors conclude that there is no advantage for cream-tinted paper. Blue-green was inferior to white and red was inferior to all others when all three measures are considered. The yellowish paper equalled white except for blinking, in which it was inferior. "Esthetic satisfaction has probably been mistaken for eye comfort."—(Courtesy *Education Abstracts*).

1583. Mowrer, O. H. **Authoritarianism vs. "self-government" in the management of children's aggressive (anti-social) reactions as preparation for citizenship in a democracy.** *Psychol. Bull.*, 1938, 35, 660.—Abstract.—A. W. Melton (Missouri).

1584. Oldfield, M. C. **Speech training for cases of cleft palate.** London: H. K. Lewis, 1938. Pp. 18. 4s. 6d.—(*Child Developm. Abstr.* XII: 2157).

1585. Opler, M. E. **Further comparative anthropological data bearing on the solution of a psychological problem.** *J. soc. Psychol.*, 1938, 9, 477-483.—Comparative data on attitude toward death obtained from the Chiricahua, Mescalero, Jicarilla, and Lipan Apache enable the author to point out that the Indians' absence of fear of death, when an old person is the victim, results from the knowledge that the elderly one has lived a full and complete life and thus his ghost has little wish for revenge. Death is to be feared, however, when it strikes a young, vigorous relative, because he is the one to whom the Indian owes obligations in respect to economics, conduct and ritual; his ghost may seek revenge for a relative's failures or death wishes.—E. D. Hunt (Brown).

1586. Parsons, T. **The role of ideas in social action.** *Amer. sociol. Rev.*, 1938, 3, 652-664.—The "controversy over the role of ideas has been much more a battle of the implications of rival philosophical and other extrascientific points of view than it has been the result of careful, empirical analysis of the facts." This paper is "devoted to the statement of a theoretical framework for the analysis of the role of ideas on an empirical, scientific basis."—I. L. Child (Yale).

1587. Pennington, L. A. **A state's contribution to American men of science.** *J. soc. Psychol.*, 1938, 9, 469-475.—The contributions of the state of Illinois to the 1927 edition of *American Men of Science* are analyzed in relation to the number of scientists native to Illinois, the number trained in the educational institutions of the state, the number residing in the state in 1927, etc. Reference to new fields of specialization which have appeared in the

list of occupations shows a broader interpretation of what is scientific.—E. D. Hunt (Brown).

1588. Popenoe, P. **Remarriage of divorcees to each other.** *Amer. sociol. Rev.*, 1938, 3, 695-699.—I. L. Child (Yale).

1589. Price, B. **Reference data on Moscow families of 1935.** *Psychol. Bull.*, 1938, 35, 696-697. Abstract.—A. W. Melton (Missouri).

1590. Remmers, H. H., & Whisler, L. D. **The effect of instruction on pupils' attitudes towards agricultural policies.** *Psychol. Bull.*, 1938, 35, 671-672.—Abstract.—A. W. Melton (Missouri).

1591. Sait, U. B. **New horizons for the family.** New York: Macmillan, 1938. Pp. 785. \$4.00.—(*Child Developm. Abstr.* XII: 2227).

1592. Sargent, S. S. **Emotional stereotypes in the Chicago Tribune—a study of newspaper propaganda arousing standardized emotional reactions in readers.** *Psychol. Bull.*, 1938, 35, 660-661.—Abstract.—A. W. Melton (Missouri).

1593. Schmid, C. F. **Report of research census of 1938.** *Amer. sociol. Rev.*, 1938, 3, 553-567.—This is a classified list of research projects which members of the American Sociological Society report they are engaged in. The list includes 36 projects classified under social psychology, 6 classified under sociology and psychiatry, and a total of 279 other projects of which a number are relevant to social psychology.—I. L. Child (Yale).

1594. Schmidt, J. **Über Beziehungen zwischen Landflucht und Intelligenz.** (The relation between urban migration and intelligence.) *Arch. Rass.- u. GesBiol.*, 1938, 32, 358-370.—The school reports for the entire enrollment of an outlying village in the neighborhood of Berlin were arranged in rank order. They included 778 children born between 1889 and 1913. The ratings show a shift of intelligence toward the city. The nearby metropolis has a considerable draining effect.—P. L. Krieger (Leipzig).

1595. Smith, M. **An experiment to test the reliability of estimates of use of time.** *J. appl. Psychol.*, 1938, 22, 400-407.—81 college students were requested to estimate the amount of time spent in each of 24 activities during an average week. For 10 days after this estimate the student recorded daily the use of his time. Students who reported themselves unwilling to co-operate, or who reported that the week in which the record was made was unusual, were not used as subjects. Two measures of reliability of the estimates were found for each activity; (1) the percentage difference between the estimates and the actual records, and (2) the coefficient of correlation between the estimate and the actual record. Items of doubtful reliability included time spent in letter writing, walking, music, walking, and riding for pleasure, and doing nothing.—S. Roslow (Psychological Corporation).

1596. Stagner, R. **Marital similarity in socioeconomic attitudes.** *J. appl. Psychol.*, 1938, 22, 340-346.—Parents of freshmen at the University of

Akron and parents of children in an Akron high school composed the two groups whose attitudes to socio-economic stimuli were determined. They indicated attitude by crossing out disliked items of religious, political, or economic bearing, such as "communist, spiritualist," etc., and by approving or disapproving on a 5-point scale statements of opinion such as "the U.S. should have the largest military and naval air fleets in the world." Tetrachoric correlations were computed, to show the degree of agreement between husband and wife on each attitude item. These ranged from .10 to .93 for the first group of parents and from .08 to .95 for the second group. There was no substantial agreement between the two groups as to similarity or dissimilarity of attitude in husband and wife. The author believes that person-to-person influences are of greater importance in determining marital agreement than are the influences of common institutions.—*S. Roslow* (Psychological Corporation).

1597. Stagner, R. Analysis of public opinion on the prevention of war. *Psychol. Bull.*, 1938, 35, 662-663.—Abstract.—*A. W. Melton* (Missouri).

1598. Steer, M. D., & Tiffin, J. A photographic study of the use of intensity by superior speakers. *Speech Monogr.*, 1934, 1, 72-78.—Six superior speakers were selected and samples of their speech were recorded phonographically. The samples were then recorded graphically by means of a high speed output level recorder. The photograph records made it possible to measure the syllables in terms of decibels. The records were analyzed from two points of view: (1) a grammatical analysis, in which the intensities of the several parts of speech were determined; and (2) a variability of loudness in which the average range of syllable loudness and the variability of this loudness was determined. Adverbs receive the greatest stress in the speech of all the speakers. Nouns and adjectives, next in importance, receive similar degrees of stress. Verbs, pronouns, conjunctions, prepositions, and articles follow in order. The standard deviation of syllable intensity for the six subjects was 4.4 decibels.—*C. V. Hudgins* (Clarke School).

1599. Stelzer, T. G. Construction, interpretation, and use of a sight reading scale in organ music, with an analysis of organ playing into fundamental abilities. *J. exp. Educ.*, 1938, 7, 35-43.—In the field of music the lack of reliable and valid criteria of likeability and of difficulty has retarded the development of reading scales. The present report indicates how these obstacles to progress in musicology may be overcome by the application of certain psychometric methods. Conclusions of the study are as follows: (1) For an individual, the range of interest in organ music is limited to a narrow range of difficulty. (2) This range of interest may be considerably increased if the criteria of likeability are employed; namely, melody, smooth progressions, and enriched harmonies. (3) The number of errors made in time and in pitch is a reliable and valid criterion for grading the difficulty of reading music at

sight. (4) The greatest improvement in reading is noticeable from the first to the second reading. If errors persist through the third reading, information and guidance are needed. (5) Fluent reading habits are best acquired when the music is within the player's range. Music that is too difficult tends to cause undesirable reading habits, or even disintegration of control.—*H. W. Karn* (Pittsburgh).

1600. Strode, J. Group treatment of social-work problems. *J. educ. Sociol.*, 1938, 12, 207-213.—"Group approach and group treatment of the organization and administrative phases of social-work programs are essential if our social workers are to perform the multiplicity of tasks with which they are confronted today." Group treatment of relief clients also is needed, but it should not develop into actual case work.—*C. N. Cofer* (Brown).

1601. Stumpf, F. Persönlichkeit, Vererbung, Gattenwahl. (Personality, heredity, and mate selection.) *Svenska Läkartidn.*, 1938, 35, 1624-1629.—This paper deals with the heredity of personality and character, and is an explanation of I.L.A. Koch's clinical investigation of abnormal personalities said to be inherited, as well as the author's "Über kriminalbiologische Erbforschung" (*Z. Psychiat.*, 1938, 107). The writer mentions his more recent investigations along two lines: the one concerns the natural law governing the selection of a mate, and the other the connection between body type and character. "A comparison of a large series of characterologically investigated married couples showed that in all cases where the marriage lasted the intelligence levels were exactly the same and that feelings, drives, sense of values, and desires on the whole were the same." Differences were found in regard to certain temperament and will dispositions (active, passive). In the natural law seemingly governing mate selection the writer sees a direct proof of the hereditary conditioning and hereditary transfer of the most important fundamental structures of character.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

1602. Sward, K. Psychological aspects of the Johnstown strike. *Psychol. Bull.*, 1938, 35, 661-662.—Abstract.—*A. W. Melton* (Missouri).

1603. Thibon, G. Le drame de Kierkegaard. (The drama of Kierkegaard.) *Etud. carmélite.*, 1938, 23, Part 1, 140-150.—In the conflict between the spirit and life, Kierkegaard emphasized the idea of subjectivity: "truth lies in subjectivity." The author believes that the reason for this choice arose from the fact that Kierkegaard considered the spirit only in its rationalistic character and ignored the conception of the spirit as God, able to unravel existential oppositions.—*G. Goldman* (Sorbonne).

1604. Todd, J. W. Some probable factors of ability in the languages. *Psychol. Bull.*, 1938, 35, 692.—Abstract.—*A. W. Melton* (Missouri).

1605. Travis, L. E., Bender, W. R. G., & Buchanan, A. R. Research contribution to vowel theory. *Speech Monogr.*, 1934, 1, 65-71.—The purpose of the

experiment was to test out two opposing vowel theories, the harmonic and the inharmonic. Sound waves of known frequencies were led into the trachea of a cadaver and out of the mouth and nose to a microphone connected with amplifier and oscillograph. A second method was to substitute living subjects for the cadaver, leading the tones into the rear of the oral cavity by means of a tube while the subjects formed the vowel positions with the tongue and lips. If frequencies not present in the source tone appeared in the recorded tone it would be evidence that the cavities had imposed these frequencies, and would afford evidence for the inharmonic theory. Results showed "first, the cavities affect the source wave, and second, these waves as thus affected are altered in their passage through the cavities." The data are tabulated in terms of percentage distribution of energy in partials.—C. V. Hudgins (Clarke School).

1606. Vaughn, J., & Diserens, C. M. The experimental psychology of competition. *J. exp. Educ.*, 1938, 7, 76-97.—This paper is devoted to a critical review of the theoretical, educational, industrial, and sociological studies on the psychology of competition. "It is apparent that the competitive attitude is largely a product of social development, but the fact that its appearance is almost universal indicates very clearly that the capacity for its development is present in all human beings. The assertion commonly encountered in studies of motivation and affective organization to the effect that every one inherits competitive or dominating urges is open to question. The particular form, intensity, and objects of competition are largely dependent on the nature of the social environment. They vary considerably among individuals and groups, and seem to be dependent on the degree of socialization which the individual and the group have achieved."—H. W. Karn (Pittsburgh).

1607. Vaughn, J., & Geldreich, E. Variability as a measure of competitive behavior. *J. exp. Educ.*, 1938, 7, 71-75.—The form of behavior measured in this study was that involved in shooting at a target with a .22 calibre rifle. Conditions of competition were called "high score," "handicap," and "improvement." Results show that the behavior of the subjects was more variable or erratic under the "high score" condition than under the other conditions. Reports of the subjects indicate this condition of relative variability to be a function of confidence in the outcome of the various matches. As a group they were more variable under that condition of competition which provided least opportunity for gaining superiority. Skin galvanic responses measured during the three conditions of competition indicate that the inhibition of overt expression, through lack of confidence, results in the deflection of the energy of conation to internal bodily organs, and these become more active than if overt expression were not inhibited.—H. W. Karn (Pittsburgh).

1608. Voelker, C. H. An experimental study of the comparative rate of utterance of deaf and normal

hearing speakers. *Amer. Ann. Deaf*, 1938, 83, 274-283.—Speech rates of 95 deaf children in the first three grades were compared with those of normal speakers. Five simple sentences were used as experimental material. Acoustic and graphic records were made for all the subjects. Normal speakers spoke the sentences at an average rate of 164 words per minute; the average for the deaf subjects was 67 words per minute. The deaf subjects showed a great deal more variability than the normal group. The author suggests that the average rate for the deaf subjects is too low and thinks that the pedagogical goal as to speech rate for deaf speakers should be at least 90 words per minute. Tables showing speech rates of well-known radio speakers are presented for comparison.—C. V. Hudgins (Clarke School).

1609. Voelker, C. H. Are affricates elemental phonemes? *Quart. J. Speech*, 1938, 24, 612-615.—Experimental phonetics provides data which demonstrate that affricates are not sound entities, but must be considered as a combination of their phonetic elements.—W. H. Wilke (New York University).

1610. Weigert-Vowinkel, E. The cult and mythology of the Magna Mater from the standpoint of psychoanalysis. *Psychiatry*, 1938, 1, 347-378.—The impossibility of solving the conflict between the individual and society drives man to the cosmic representative of society, before whom he is as a helpless child. The religious life is a dramatization, projected into the cosmos, of the fears and drives arising from the child-parent relation. The psychoanalytic train of thought revolves chiefly about the typical father-son conflict and its solution in religion. The task of the paper is to study the cult and myths of the Great Mother of Asia Minor. A detailed record of the cult and myths and their historic development is given and a psychoanalytic interpretation is attempted. The comparison of the matriarchal cultures with others shows the dangerous ambivalence of man in his relation to the wife and mother as the result of his dependence on them. The belief in a hermaphroditic deity reflects the regression of religious experience from the genital to the oral-anal stage of organization of the instinctual life. The more primitive the religion, the more incomplete is the desexualization. The (later) sacrifice of genitality seals the perpetual mother-child relation.—M. Grotjahn (Chicago Institute for Psychoanalysis).

1611. Weld, H. P. The formation of opinion. *Psychol. Bull.*, 1938, 35, 695-696.—Abstract.—A. W. Melton (Missouri).

1612. Werner, H. On musical "micro scales" and "micro melodies." *Psychol. Bull.*, 1938, 35, 700.—Abstract.—A. W. Melton (Missouri).

1613. Whisler, L. D., & Remmers, H. H. Liberalism, optimism, and group morale: a study of student attitudes. *J. soc. Psychol.*, 1938, 9, 451-467.—Three applications of the "scale to measure individual and group morale" yielded .36, .55 and .56 correlations between forms A and B, from 150 men and 149



women undergraduate students in psychology. The curve of judged "goodness of living" is curvilinear. In student comparisons of 4 arbitrary groups, "pioneer Americans" scored only slightly lower than "present-day Americans," "pre-war Americans" considerably lower, and "Americans 30 years hence" scored significantly high. Students think they are happier than their parents. Little relation was found between attitudes toward the four era groups and either intelligence and liberalism, or between satisfaction with life and intelligence and liberalism. A positive relation ( $r = .32$ ) was found between liberalism and intelligence.—*E. D. Hunt* (Brown).

1614. **White, R. K.** Democratic and autocratic group atmospheres. *Psychol. Bull.*, 1938, 35, 694.—Abstract.—*A. W. Melton* (Missouri).

1615. **Winstanley, H.** The limitations of evidence. *Police J., Lond.*, 1929, 2, 177-187.—The author indicates the sources of error to which honest witnesses are liable: errors of observation, perception, interpretation and memory. In addition, emotional and pathological conditions tend to vitiate ordinary evidence. Scientific evidence, being free from these influences, is obviously of greater importance.—*A. Chapanis* (Yale).

1616. **Zipf, G. K.** Homogeneity and heterogeneity in language; in answer to Edward L. Thorndike. *Psychol. Rec.*, 1938, 2, 347-367.—A reply to the three following criticisms by Thorndike of the author's contention that there is "a tendency to maintain an equilibrium in the stream of speech between the frequency on the one hand and what may tentatively be termed variety on the other": (1) the relationship between frequency of occurrences of word usage and the number of words used is not constant for the total usage by persons, however true it might be for the size of Zipf's samplings; (2) the uniform relationship for total usage is no convincing evidence of a uniform tendency to equilibrium between frequency and variety, since it is likely to be a statistical artifact; (3) there cannot be "a force wider and deeper than any of these acting to produce equilibrium for equilibrium's sake."—*P. S. de Q. Cabot* (Simmons).

1617. **Zuckermann, S.** La vie sexuelle et sociale des singes. (The sexual and social life of monkeys.) (Trans. from the English by A. Petitjean.) Paris: Gallimard, 1937. Pp. 247. 25 fr.—In a series of sociological and sexological studies the author analyzes the mechanism underlying the organization of life among different species of monkeys and anthropoids, and draws certain conclusions as to the social level of subhuman primates. He believes that monogamy in primitive man arose from his needs as a carnivorous animal.—*G. Goldman* (Sorbonne).

[See also abstracts 1239, 1245, 1253, 1263, 1268, 1276, 1286, 1296, 1320, 1327, 1334, 1343, 1368, 1396, 1402, 1421, 1448, 1453, 1457, 1469, 1475, 1485, 1494, 1504, 1507, 1508, 1514, 1521, 1523, 1528, 1532, 1533, 1624, 1630, 1643, 1666, 1669, 1684, 1687, 1694, 1695, 1696, 1697, 1701, 1738, 1748, 1751, 1760.]

## CRIME AND DELINQUENCY

1618. **Baila, G.** Milieu familial et milieu social de l'enfant délinquant. (The family and social environments of the delinquent child.) *Rev. méd. soc. Enfance*, 1937, 5, 28-38.—It is very difficult to distinguish between the respective roles of environment and heredity in the history of the delinquent child. The principal factors arising from the family environment which lead to delinquency are a low level of economic resources, a lack of a permanent home, and alcoholism in the parents; factors from the social environment are humiliations and tedium; and factors from the occupational environment are the atmosphere of the workshop and that of the street and the cinema which the child frequents.—*G. Goldman* (Sorbonne).

1619. **Ballotta, F.** Una delle possibile cause della delinquenza minorile: l'abbandono. (A possible cause of juvenile delinquency: abandonment.) *Arch. Antrop. crim.*, 1938, 58, 629-637.—Defining the term to include not only physical abandonment but also the feeling of being isolated, neglected, or misunderstood, the author reviews possible causes for such feelings in youth, and points out that since it is only a step from the asocial to the antisocial, the removal of such causes is a promising crime prevention method.—*C. J. Herrick* (Pennsylvania).

1620. **Beer, E. S.** Crime prevention. *J. juv. Res.*, 1938, 22, 176-183.—*F. M. Teagarden* (Pittsburgh).

1621. **Hanks, L. M., Jr.** Preliminary for a study of disciplinary problems in prison. *Psychol. Bull.*, 1938, 35, 630-631.—Abstract.—*A. W. Melton* (Missouri).

1622. **Harris, D. B.** Use of the anecdotal behavior journal in a correctional school for boys. *J. juv. Res.*, 1938, 22, 162-169.—This article reports the use of a "behavior record" in the Minnesota State Training School. "The Behavior Record is not a statistical device—an instrument that can be scaled, scored, and referred to a set of norms. Probably it can never be mechanically treated." "In the Minnesota State Training School, which exists for the rehabilitation of atypical individuals, the Behavior Record is proving its worth to the teaching, clinical, and administrative staffs in a field where measurement is badly needed but where refined tools have not yet been developed."—*F. M. Teagarden* (Pittsburgh).

1623. **Herold, H. H.** Die Kriminalität der Vorbestraften. (The criminality of recidivists.) *Bottrup i. W.*: Postberg, 1938. Pp. 47.—*R. R. Willoughby* (Brown).

1624. **MacGill, H. G.** The oriental delinquent in the Vancouver juvenile court. *Sociol. soc. Res.*, 1938, 22, 428-438.—Although the orientals live in disintegrated areas where a high rate of delinquency would be expected, they have a very low rate of cases that come to the juvenile court. The good behavior of oriental children seems to result from the

close control of the family and the national schools which inculcate the principles of oriental culture and submission to the family and also closely supervise the free time of the children.—(Courtesy *Child Developm. Abstr.*).

1625. Radzinowicz, L. Variability of the sex-ratio of criminality. *Sociol. Rev.*, 1937, 29, No. 1.—R. R. Willoughby (Brown).

1626. Ross, R. Intemperance and crime in Scotland. *Police J., Lond.*, 1929, 2, 109-120.—"The Scots have usually been regarded as one of the hard-drinking nations" and recent legislation regulating and licensing the sale and distribution of alcoholic beverages has resulted in a definite decrease in the number of arrests for drunkenness. The author discusses the alleged relationship between intemperance and crime, and indicates that drunkenness may be a contributing factor in the commission of petty offenses, such as breaches of the peace. By far the larger number of deliberate crimes, however, are committed by non-drinking criminals.—A. Chapanis (Yale).

1627. Selling, L. S. Some techniques and pitfalls of psychological tests of criminals. *Psychol. Bull.*, 1938, 35, 630.—Abstract.—A. W. Melton (Missouri).

1628. Sjöbring, H. Brot och personlighet. (Crime and personality.) *Svenska Läkartidn.*, 1938, 35, 1663-1671.—The article is an endeavor on the part of the writer "from my own psychological theories to gain a knowledge of the given presuppositions for criminal deeds inherent in personality and thereby gain insight and enlightenment as a guide for closer investigation of the empirical material in each case."—M. L. Reymert (Mooseheart Laboratory for Child Research).

1629. Skodak, M. Girls on parole—and after. *J. juv. Res.*, 1938, 22, 145-162.—A study was made of the records of 103 girls paroled from the Iowa Training School for Girls. "Sixty-eight per cent of the girls who are discharged are known to have made acceptable adjustments in society. Twenty per cent are known to have done poorly and twelve per cent are unknown." Comparisons are made between those who succeeded on parole and those who did not. "The factors in successful social adjustment are subtle and defy measurement. Study of individual cases and the application of new and more refined techniques constitute the next step toward the solution of the problems involved in readjusting adolescents to a society with which they have come in conflict." 12 references are cited in the bibliography.—F. M. Teagarden (Pittsburgh).

1630. Slawson, J. The use of the authoritative approach in social case work in the field of delinquency. *Amer. J. Orthopsychiat.*, 1938, 8, 673-678.—Authority is conceived of as "an external force . . . applied for the purpose of giving direction to the action taken by the client." Four cases are cited to illustrate some of the constructive uses of

the authoritative approach. It is concluded that authority "may become a very useful tool in social case work in general and in case work in the official field in particular. When diagnostically initiated it is not a negative tool employed because of expediency or futility, but can become a positive approach ranking in validity and effectiveness with other treatment approaches currently in use."—S. W. Bijou (Delaware State Hospital).

1631. Stephen, H. L. Insanity and crime. *Police J., Lond.*, 1929, 2, 218-224.—The author discusses the law of England with regard to the relationship of insanity to crime and the problem of criminal responsibility of the insane. The present interpretation of the law is that a mentally unsound person may still be criminally responsible, an opinion not shared by the Medico-Psychological Association. Justification for this view comes from the fact that "Insanity . . . is a very vague term, incapable of definition, and on that account unfit for use in what ought to be the precise language of the law." Furthermore, "The question whether or not a man is to be punished is admittedly a legal question, however much the services of doctors may be required to answer it." One of the reasons for inflicting punishment is to deter others from committing the same crime, and this effect of deterrence is not to be withheld from people suffering from mental defect or disease.—A. Chapanis (Yale).

1632. Stogdill, R. M. A test-interview for delinquent children. *Psychol. Bull.*, 1938, 35, 631.—Abstract.—A. W. Melton (Missouri).

1633. Wollan, K. I., & Gardner, G. E. A group-clinic approach to delinquency. *Ment. Hyg., N. Y.*, 1938, 22, 567-584.—A study of the effectiveness of group therapy during the probationary period for juvenile delinquents. All boys between the ages of 13 and 17 who are placed on probation by the Boston juvenile courts are sent to the citizenship training department. They enter the class on the Monday after their court appearance, and attend five days a week for seven consecutive weeks between 4 p.m. and 7 p.m. A complete study is made of each case; then observations of the boy in a group situation are made and group therapy is instituted. This program has been found effective, since it is necessary to have group therapy as well as individual therapy to prepare the boy adequately for his role in society.—P. Brand (New York City).

[See also abstracts 1464, 1530.]

## INDUSTRIAL AND PERSONNEL PROBLEMS

1634. Allgaier, E. Drivers 20 to 40 rate highest on tests. *Psychol. Bull.*, 1938, 35, 651-652.—Abstract.—A. W. Melton (Missouri).

1635. Bills, M. A., & Davidson, C. M. Study of interrelation of items on Bernreuter personality inventory and Strong's interest analysis test, part VIII, and their relation to success and failure in

selling casualty insurance. *Psychol. Bull.*, 1938, 35, 677.—Abstract.—A. W. Melton (Missouri).

1636. Cleeton, G. U. Implications of industrial selection by tests. *Psychol. Bull.*, 1938, 35, 678-679.—Abstract.—A. W. Melton (Missouri).

1637. DeSilva, H. R. Age and highway accidents. *Sci. Mon.*, N. Y., 1938, 47, 536-545.—Inadequate statistics relative to age, status (pedestrian, driver, passenger), and cumulative records, handicap investigations in this important field. It appears that the driver in the late teens and twenties and the driver in the fifties and sixties are less safe than the driver in the thirties and forties. Most fatalities among adult pedestrians occur in the age range between fifty and seventy.—O. P. Lester (Buffalo).

1638. Finch, F. H. Employment trends in applied psychology. *Psychol. Bull.*, 1938, 35, 677.—Abstract.—A. W. Melton (Missouri).

1639. Forbes, T. W. Age performance relationships among accident-repeater automobile drivers. *J. consult. Psychol.*, 1938, 2, 143-148.—A comparison between the scores of 138 automobile accident-repeaters and 52 volunteer drivers in a battery of tests shows that the former are consistently poorer "in brake reaction time (by hand co-ordination), vigilance steering, braking-steering balance and miniature-highway safe passes." Young and old drivers can be re-educated. Attitudinal factors such as over-confidence and carelessness characterize the mistakes of young drivers who have accidents. Specific education in test clinics is more effective than generalized safety education: the former type of education reduced by over 50% the accidents occurring after generalized education.—P. S. de Q. Cabot (Simmons).

1640. Forbes, T. W., & Matson, T. M. Driver judgments in passing on the highway. *Psychol. Bull.*, 1938, 35, 652.—Abstract.—A. W. Melton (Missouri).

1641. Freiberg, A. D. A method of measuring the effect of advertising influences on people's behavior. *Psychol. Bull.*, 1938, 35, 649.—Abstract.—A. W. Melton (Missouri).

1642. Hamlin, R., & Abel, T. M. Test pattern of mental defectives skilled in weaving. *J. appl. Psychol.*, 1938, 22, 385-389.—Mentally deficient girls who had been given instructions in weaving were divided into a successful group of 20 and an unsuccessful group of 10. A series of 17 tests of intelligence was administered, but only 4 yielded scores in which the successful weavers were superior. These tests were the Seguin, Ferguson, Knox cubes, and Healy A. Three other tests were selected in which there was no difference. The ratio of the differentiating tests to the non-differentiating tests yielded an even more reliable difference between the two groups, with no overlapping.—S. Roslow (Psychological Corporation).

1643. Humes, J. F. Some effects of music on workers in a radio-tube manufacturing plant.

*Psychol. Bull.*, 1938, 35, 650.—Abstract.—A. W. Melton (Missouri).

1644. Jenkins, J. G. Additional variables in trade-name confusion. *Psychol. Bull.*, 1938, 35, 649-650.—Abstract.—A. W. Melton (Missouri).

1645. Link, H. C. Practices and services of the Psychological Service Center. *J. consult. Psychol.*, 1938, 2, 149-154.—An essential principle of the work of this organization is that the client maintains his independence and sense of responsibility. Prolonged analyses are discouraged. Cases requiring medical or psychiatric treatment are referred elsewhere. In diagnosis the emphasis is placed upon an attempt to discern simple obvious causes before more serious complications are investigated. Elementary principles of hygiene and the viewpoints of normal psychology are stressed. The maximum use of a great variety of possibly helpful tests supplements other judgments after a careful case history is considered. The major attention is paid to questions dealing with emotional and personality development. Vocational and educational guidance are held to be important, although the doubtful value of tests in determining the choice of specific vocations is observed. A definite understanding concerning fees is agreed upon before any work is done.—P. S. de Q. Cabot (Simmons).

1646. Modrach, A. Psychologie in der Zahnbehandlung. Erfolg im Umgang mit Patienten. (Psychology in dentistry. Success in dealing with patients.) Dresden: Püschel, 1938. Pp. 78. RM. 3.00.—R. R. Willoughby (Brown).

1647. Ridenour, N. Notes on the status of clinical psychology. *J. consult. Psychol.*, 1938, 2, 137-142.—An analysis of the membership of clinical psychologists within the A.P.A. and the Association of Clinical Psychologists within the State of New York. Authoritative data are needed concerning the number of clinical psychologists and their qualifications. "Only about one half of the psychiatric clinics in New York City employ clinical psychologists." Suggestions are given for the organization of a central clearing house for the collection and distribution of information dealing with the vocational possibilities for psychologists. Portrait of A. T. Poffenberger.—P. S. de Q. Cabot (Simmons).

1648. Seder, M. Vocational interest patterns of professional women. *Psychol. Bull.*, 1938, 35, 643.—Abstract.—A. W. Melton (Missouri).

1649. Sharp, A. A. Study of one hundred cases of automobile drivers arrested for accidents or traffic violations. *Psychol. Bull.*, 1938, 35, 651.—Abstract.—A. W. Melton (Missouri).

1650. Shartle, C. L. Thirty studies of occupation abilities. *Psychol. Bull.*, 1938, 35, 679.—Abstract.—A. W. Melton (Missouri).

1651. Taylor, H. C., & Russell, J. T. The relationship of validity coefficients to the practical effectiveness of tests in the employment situation.



*Psychol. Bull.*, 1938, 35, 652.—Abstract.—A. W. Melton (Missouri).

1652. Tiffin, J., & Greenly, R. Employee selection tests for radio assemblers and electrical fixture assemblers. *Psychol. Bull.*, 1938, 35, 677-678.—Abstract.—A. W. Melton (Missouri).

1653. Wallar, G. A. The occupational orientation inquiry. *Psychol. Bull.*, 1938, 35, 679.—Abstract.—A. W. Melton (Missouri).

1654. Wells, F. L., Williams, R., & Fowler, P. One hundred superior men. *J. appl. Psychol.*, 1938, 22, 367-384.—The scores on various tests, such as intelligence, vocabulary, and personality, of a group of men with incomes above \$5000 during 1929 to 1935 were compared with those of a group of men with incomes less than \$1800 since 1929. No statistically significant differences were found. The largest differences were found in the Bernreuter stability and dominance and the Hepner executive reaction scales.—S. Roslow (Psychological Corporation).

[See also abstracts 1270, 1353, 1655, 1688.]

## EDUCATIONAL PSYCHOLOGY

(incl. Vocational Guidance)

1655. Anderson, R. G. Some technological aspects of counseling adult women. *Psychol. Bull.*, 1938, 35, 631-632.—Abstract.—A. W. Melton (Missouri).

1656. [Anon.] U. S. Office of Education study of training courses for teachers of the deaf. *Amer. Ann. Deaf*, 1938, 83, 428-441.—A list of courses offered by 14 institutions which train teachers for work in schools for the deaf. The list was taken from Bulletin No. 17, 1937, Federal Office of Education: "Opportunities for the Preparation of Teachers of Exceptional Children."—C. V. Hudgins (Clarke School).

1657. [Anon.] Evaluation of the sophomore comprehensives test scores as related to intelligence and to scholarship. *Res. Off. Bull., Univ. Louisville*, 1938, No. 5.—The following tests on the sophomore comprehensive examinations discriminate best between students high in intelligence and scholarship and those low in both: total general culture, the history and social studies, and the foreign literature sections of the general culture test, English usage, total English, and local literature.—M. Keller (Butler Hospital).

1658. Ashburn, R. An experiment in the essay-type question. *J. exp. Educ.*, 1938, 7, 1-3.—University students were given essay questions on Dante and the answers graded by three members of the faculty, all authorities on Dante. An analysis of the results of this grading shows that the passing or failing of about 40% of the students depends, not on what they know, but on who reads the papers. The passing or failing of about 10% of the students depends on when the papers are read.—H. W. Karn (Pittsburgh).

1659. Bennett, W. [Ed.] Occupations and vocational guidance; a source list of pamphlet material. (3rd ed. rev.) New York: Wilson, 1938. Pp. 160. \$1.25.—R. R. Willoughby (Brown).

1660. Breed, F. S. Our general outlook on arithmetic. *J. educ. Res.*, 1938, 32, 241-254.—After consideration of certain theoretical bases for the approach to arithmetic, such as the selection of a particular theory of numbers, the author points out that two abilities are involved for successful practice in this field. One is the ability to manipulate correctly abstract numbers in the four fundamental processes of addition, subtraction, multiplication, and division, and the other is a reasoning ability to determine which of these four processes should be applied in a particular instance. There is further discussion of the advantage of using arithmetical techniques for the teaching of social information and for other purposes in the school curriculum.—S. W. Fernberger (Pennsylvania).

1661. Brownman, D. E. Measurable outcomes of two methods of teaching experimental geometry. *J. exp. Educ.*, 1938, 7, 31-34.—During the course of this experiment, as revealed by various achievement tests, a transition occurred from a trend in favor of the lecture-demonstration method of teaching experimental geometry to one in favor of the individual-laboratory method. The latter trend is marked by statistically significant differences in favor of the individual-laboratory method with respect to scores, descriptive concepts, and experimental concepts. With reference to skills and problems involving an integration of concepts and skills, the differences, while in favor of the individual-laboratory method, were small and statistically insignificant.—H. W. Karn (Pittsburgh).

1662. Clark, C. D., & Gist, N. P. Intelligence as a factor in occupational choice. *Amer. sociol. Rev.*, 1938, 3, 683-694.—The authors had access to the records of the administration of Terman intelligence tests to a large number of rural high school students in Kansas in 1922-23. Research assistants visited the students' original communities in 1935 and 1936 and collected data on their present occupation and residence. Complete records were obtained for 2423 persons. Occupations were grouped into 10 categories; distributions, means, and standard deviations of high-school IQ score are presented for each category. Many reliable differences were found between the various occupational categories. The results conformed in general with results of previous studies which have compared children's IQ with parental occupation. For each category, a comparison is made between individuals now having rural and urban residence; all but one comparison show a higher mean IQ for urban residents, but most of the differences are not reliable.—I. L. Child (Yale).

1663. Clark, V. D. The effect of NYA employment on the grades of men and women in college. *Sch. & Soc.*, 1938, 48, 803-804.—NYA men and women at the University of New Mexico were

compared as to load of work and grades obtained with non-working students. The NYA men carry as much work as other men, but the women carry less than other women students. In both cases a higher grade average is obtained by the workers, but the difference is not great enough to be statistically reliable.—*M. Lee* (Chicago).

1664. Cox, P. W. L., & Duff, J. C. *Guidance for the classroom teacher*. New York: Prentice-Hall, 1938. Pp. 560. \$3.00.—*R. R. Willoughby* (Brown).

1665. Cross, A. J. F. *Habits and characteristics of "best" pupils*. *Psychol. Bull.*, 1938, 35, 668-669.—Abstract.—*A. W. Melton* (Missouri).

1666. Curtis, E. A., & Nemzek, C. L. *The relation of certain unsettled home conditions to the academic success of high school pupils*. *J. soc. Psychol.*, 1938, 9, 419-435.—Six factors were considered broken-home conditions: loss of father by death, divorce or separation, unemployment of father, loss of mother by death, divorce or separation, and employment of mother outside the home. 50 pupils for each of these categories were paired with pupils from normal homes on the bases of intelligence, chronological age, grade in school, sex, and nationality. An honor-point average based upon teachers' marks, computed for each of the 600 pupils, indicated that the school achievement of pupils from broken homes is inferior to that of pupils from normal homes. This was true for 7 comparisons, 4 of which were statistically significant while 2 approached statistical significance. The experimental and control pupils were later compared on a number of additional factors, such as number of siblings and language spoken in the home; none of these additional variables revealed more than a negligible difference.—*E. D. Hunt* (Brown).

1667. Curtis, H. A. *Wide reading for beginners*. *J. educ. Res.*, 1938, 32, 255-262.—Analysis of 10 recent pre-primers indicates the use of 241 different words. Frequencies are worked out for the 72 words most frequently used, which are conceived as forming a basic pre-primer vocabulary, and of the 72 words of next most frequent occurrence. Each of the 10 pre-primers is analyzed in these terms. The author concludes that the core vocabulary of the most frequent 72 words "is far superior to any text vocabulary for the reading of books or units from any other series," and that the use of such a vocabulary will make wide reading entirely practicable for beginners.—*S. W. Fernberger* (Pennsylvania).

1668. Dwyer, P. S. *Some suggestions concerning the relationship existing between size of high school attended and success in college*. *J. educ. Res.*, 1938, 32, 271-281.—Study of 1222 students in the non-professional schools at the University of Michigan indicates that pupils from smaller high schools are less likely to survive the four years of college. But the analysis also indicates that there is no valid difference for those who survive the junior year in regard to the size of the high school attended

before college. Bibliography of 14 titles.—*S. W. Fernberger* (Pennsylvania).

1669. Engle, T. L. *A study of the effects of school acceleration upon the personality and social adjustments of high-school and university students*. *J. educ. Psychol.*, 1938, 29, 523-539.—Pairs of high-school students were matched in terms of sex, grade location, intelligence rating, and school marks, and each high-school pair included one student who entered high school at age 12 or younger and one who entered at age 14. College students were similarly matched, except that one entered college at age 16 or younger and one entered at age 18. The Cowan adolescent personality schedule, a short questionnaire on social activities, and interviews provided measures of personality adjustment. Scores of subjects who believed that acceleration had been a social handicap were found to be appreciably higher (more maladjusted) than those of subjects who believed that acceleration had not been a handicap. In general, personality adjustment, as measured by the personality schedule, is not appreciably affected by the single factor of school acceleration.—*A. W. Melton* (Missouri).

1670. Gates, A. I. *Prediction of ability and disability in reading*. *Psychol. Bull.*, 1938, 35, 669-670.—Abstract.—*A. W. Melton* (Missouri).

1671. Gay, R. C. *A case study of word deafness*. *Amer. Ann. Deaf*, 1938, 83, 169-176.—A description of methods of teaching a 5-year-old "word deaf" child from the beginning through his entrance into public school two years later.—*C. V. Hudgins* (Clarke School).

1672. Grant, A. *An analysis of the number knowledge of first-grade pupils according to levels of intelligence*. *J. exp. Educ.*, 1938, 7, 63-66.—This investigation analyzed according to levels of intelligence the responses of 563 beginning first-grade pupils to a test of number knowledge (Test 5, Metropolitan Readiness tests). Intelligence quotients were determined by the Pintner-Cunningham test. Results are tabulated and discussed under the following headings: (1) relation of ability to count and level of intelligence; (2) relation of ability to identify, write, and interpret numbers, and level of intelligence; (3) relation of ability to add, subtract, and multiply, and level of intelligence; (4) relation of knowledge of geometrical forms and number vocabulary, and level of intelligence.—*H. W. Karn* (Pittsburgh).

1673. Höxter, R. *Bárczi method and its application in the school for the deaf of the Alliance Israélite Universelle*. *Amer. Ann. Deaf*, 1938, 83, 387-403.—A method of auricular training for deaf children developed by Bárczi in Budapest is described. The author declares that he has used the method with success and presents briefly case histories of 22 totally deaf children with whom the method has been used. The children learn to hear words and sentences spoken into their ears without the aid of instruments. Diverse opinions by otologists and teachers as to whether the method develops true

hearing or "touch hearing" are presented. Verbal reports from persons who have lost their hearing as result of meningitis, and upon whom the method has been used, seem to indicate that they actually hear the speech sounds.—C. V. Hudgins (Clarke School).

1674. Huggett, A. J. An experiment in reading readiness. *J. educ. Res.*, 1938, 32, 263-270.—Application of five tests for reading readiness to a group of young children indicates that the girls make better scores than the boys, which the author believes is due to the higher intelligence and greater facility of the girls in respect to language usage. He also concludes, as a result of a follow-up study of the same children in the first grade, that the predictive value of the tests is not always high. Criticism is made of the different individual tests employed.—S. W. Fernberger (Pennsylvania).

1675. Johnson, B. E. The effect of budgeting time on the achievement of freshmen normal school girls. *J. exp. Educ.*, 1938, 7, 44-48.—The results of this study indicate that definite planning for the use of the 24 hours of the day does not show any positive effect on the scholastic achievement of normal school girls. A number of factors are considered which might account for the failure to find positive effects.—H. W. Karn (Pittsburgh).

1676. Johnson, B. E. An evaluation of normal school sororities. *J. exp. Educ.*, 1938, 7, 49-54.—Results of this study indicate that sorority women are about twice as active in student organizations as non-sorority women. The study has further shown that a girl's chances of being elected to a sorority are conditioned by the fact that relatives or friends have previously belonged to such organizations. Other factors conditioning chances of election are rural residence, commuting, and financial status of the family. Sorority women believe their organizations to be a valuable aid in developing desirable social habits, while only about half of non-sorority women believe these organizations to be valuable in this respect. Non-sorority women strongly object to being rushed by a sorority and then not being given an invitation to join that sorority.—H. W. Karn (Pittsburgh).

1677. Johnson, B. E. The effect of written examinations on learning and on the retention of learning. *J. exp. Educ.*, 1938, 7, 55-62.—"On the assumption that the control and experimental groups were adequately equated and that the informal objective examination used as pre-test, end-test, and post-test was adequate to measure differences in achievement, the results of this study confirm the findings of previous studies which have shown that the use of examinations stimulates achievement to a significant degree. The results of this study also confirm the findings of previous studies in that there is as yet no evidence to show that the greater achievement which has been induced by examinations persists after six weeks to three months."—H. W. Karn (Pittsburgh).

1678. Knight, E. E. A study of double grades in New Haven city schools. *J. exp. Educ.*, 1938, 7, 11-18.—With complete Stanford Achievement tests showing no difference between the progress of children of the fourth grade in single and double grade rooms; with two English tests favoring double grades and two the single; and with social studies favoring double grades by a small margin, it is concluded that scholastically there is little difference, if any, between fourth grade pupils in single and combination grade rooms. At least the subjects of this study in the double grades did not suffer educationally from the combination grade type of organization.—H. W. Karn (Pittsburgh).

1679. Kramaschke, W. Schulleistung und psychischer Konstitutionstypus. (School performance and psychic constitutional type.) *Z. menschl. Vererb. u. Konst. Lehre*, 1938, 22, Pp. 49.—R. R. Willoughby (Brown).

1680. Künkel, F. The conception of the "We" and its value in educational difficulties. *J. ment. Sci.*, 1938, 84, 1056.—Abstract.—C. J. Herrick (Pennsylvania).

1681. Lauer, A. R., Henry, L. K., & Fritz, M. F. Improving the reading ability of college students. *Psychol. Bull.*, 1938, 35, 670.—Abstract.—A. W. Melton (Missouri).

1682. Lurie, W. A. Intra-individual and extra-individual factors influencing the levels of vocational aspiration and achievement. *Psychol. Bull.*, 1938, 35, 662.—Abstract.—A. W. Melton (Missouri).

1683. McGarvey, J. W. Interest in psychology as affected by studying introductory psychology. *Psychol. Bull.*, 1938, 35, 668.—Abstract.—A. W. Melton (Missouri).

1684. Moss, M. A. The effect of speech defects on second grade reading achievement. *Quart. J. Speech*, 1938, 24, 642-654.—36 pairs of pupils were matched for CA and IQ. The experimental group (those with speech defects) scored lower on the Gray oral reading tests in both rate and number of errors.—W. H. Wilke (New York University).

1685. Nemzek, C. L. The value of amount of tardiness and absence for direct and differential prediction of academic success. *J. exp. Educ.*, 1938, 7, 4-10.—The results of this study indicate that an increase in amount of tardiness or absence will generally be accompanied by a slight decrease in school marks. The degree of this inverse relationship is slightly higher in the case of boys than in the case of girls. The amount of tardiness and amount of absence have negligible value for purposes of differential prediction.—H. W. Karn (Pittsburgh).

1686. Noll, V. H. The effect of written tests upon achievement in college classes: an experiment and a summary of evidence. *Psychol. Bull.*, 1938, 35, 670-671.—Abstract.—A. W. Melton (Missouri).

1687. Norvelle, L. Development and application of a method for measuring the effectiveness of instruction in a basic speech course. *Speech Monogr.*, 1934, 1, 41-65.—A method is described for



measuring the effectiveness of speech teaching by having students rate members of the speech class on a 10-point scale of "effective elements." The scale was constructed from a list of "most effective elements" obtained from leading speech texts, prominent speakers, and teachers of public speaking. The effectiveness of the method lies in pointing out to the students the weak points in their speeches as rated by other members of the class. 500 students showed improvement over a 6-week period on all 10 points of the scale. The improvement ranged from 6.4 points on audibility to .3 points in agreeableness. Women showed greater improvement than men.—*C. V. Hudgins* (Clarke School).

1688. Otis, J. L. The prediction of success in power sewing machine operating. *J. appl. Psychol.*, 1938, 22, 350-366.—Criterion scores were obtained for 52 girls in a power operating class in a vocational school. The criterion was determined from five work samples, three of which were objectively scored and two of which were subjectively rated by experts. Two criterion scores for each subject were determined, a quality criterion and a speed criterion. From a large number of tests administered to the girls, the Minnesota clerical (names), tracing test (time), weaving test, paper folding test, Minnesota spatial relations (time), and the Minnesota paper form boards A and B gave a battery with best prediction of the quality criterion. The best prediction of the speed criterion was obtained by a battery including the tweezer dexterity test, tracing test (time), finger dexterity, manual dexterity, and Minnesota clerical (numbers).—*S. Roslow* (Psychological Corporation).

1689. Palmer, S. D. Education of the deaf in the Orient. *Amer. Ann. Deaf*, 1938, 83, 291-299.—"The information here presented is intended only to show the extent and general nature, as well as some interesting aspects, of the education of the deaf in the Orient. The schools of Japan, Korea, China, and the Philippine Islands are discussed."—*C. V. Hudgins* (Clarke School).

1690. Parks, R. G. Objectives and skills in teaching reading in schools for the deaf. *Amer. Ann. Deaf*, 1937, 82, 425-432.—The author lists five reading stages or levels: pre-reading stage, initial stage, rapid-progress stage, wide-reading stage, and studious stage. Each of these stages is discussed and suggestions are presented for teachers. "No one method of instruction has yet been originated that covers all of the skills of reading. We must recognize this fact and change our teaching methods to fit the child and his disabilities rather than fit the child to our methods."—*C. V. Hudgins* (Clarke School).

1691. Pavan, A., & Hoppock, R. An appraisal and abstract of available literature on occupations in music. New York: Nat'l Occupational Conference, 1938. Pp. 15. \$0.10.—*R. R. Willoughby* (Brown).

1692. Phipps, W. R. An experimental study in developing history reading ability with sixth grade pupils through the development of an active history vocabulary. *J. exp. Educ.*, 1938, 7, 19-23.—Under

conditions which obtained in this experimental study the findings seem to indicate that: (1) The ability to ready history can be improved by giving attention to the development of a meaningful vocabulary in history. (2) Apparently one of the factors which determines the specific nature of reading material is the vocabulary in which the material is written. (3) In order to develop an adequate background for the reading of sixth grade history material the method employed should take into account the process of learning to read. (4) There is a definite relation among aural comprehension, verbal expression, and reading. When the ability to comprehend aurally and the ability to express verbally are well developed the ability to read is improved.—*H. W. Karn* (Pittsburgh).

1693. Pullias, E. V. The relationship between education and mental hygiene. *Ment. Hyg., N. Y.*, 1938, 22, 612-624.—A discussion of the sources of interest in mental problems. A statement of the educationist's point of view in regard to mental hygiene. An explanation of the factors that favor the use of education for the prevention and correction of mental problems. Finally there is a discussion of the present goals and achievements of the educational system. These must be reorganized so that the educational system will be prepared to inaugurate and carry out a program of hygienic education.—*P. Brand* (New York City).

1694. Punke, H. H. Sociological factors in absence from school. *J. educ. Res.*, 1938, 32, 282-290.—Study of school absences of 753 children in the county and city white schools in southern Georgia in regard to age, sex, sibling position, retardation, death of parent, and place of residence. The author concludes that country children are absent more than city children and boys more than girls, while sibling position and loss of a parent seem to have no effect on regularity of school attendance.—*S. W. Fernberger* (Pennsylvania).

1695. Remmlein, M. K. Analysis of high-school student leadership. *Psychol. Bull.*, 1938, 35, 669.—Abstract.—*A. W. Melton* (Missouri).

1696. Rinsland, H. D., & Moore, J. H. The vocabulary of elementary school children of the United States. *Univ. Okla. Bull.*, 1938. Pp. 46.—This study is a Works Progress Administration project; data gathered seem to indicate that it is more desirable to have a list of the 1000 most frequently used words for each grade rather than limit the list to 500.—(Courtesy *J. educ. Res.*).

1697. Rothney, J. W. M., & McGaul, R. L. Reading preferences of high-school boys. *Engl. J.*, 1938, 27, 650-660.—This is a study of independent reading choices of high-school boys as a measure of success of English teachers in stimulating good reading taste. The group studied, 306 eleventh-grade, college-preparatory boys, was found to be "representative" as to scholastic aptitude, socioeconomic status, and background of preparation. The procedure offered an opportunity to indicate lack of familiarity, as well as like, dislike or in-

difference for 49 types of reading. Vulgar publications, as *Ballyhoo*, were rather more popular than types of literature used in English courses. Magazines and newspapers were preferred to books. Of the former, comic, scientific, news, boys' stories, popular fiction, movie, radio, and detective stories were the types best liked, in that order. Sections of newspapers preferred were: local and school news; sports; comics and jokes; gossip columns; editorials; politics; book reviews; and news summaries. Books preferred were on sports, the sea, mysteries, adventure, and vocational subjects. It was concluded that the English teacher fails in motivation of reading taste. Poor choice of content, ignoring of current and existing interests, weakness in teachers, and methods are suggested reasons.—*D. Bailey* (Mary Baldwin).

1698. Seashore, C. E. A preview to college and life. *Univ. Ia Stud. Aims Progr. Res.*, 1938, No. 55. Pp. 78.—This volume consists of a series of open letters, each addressed to a college class and dealing with an issue that is likely to be uppermost at that class level. The open letter to a freshman is entitled "Learning and Living in College," that to a sophomore "The Choice of a Career," to a junior "The Wages of a Scholar," to a senior "Whither Ahead?" and to a graduate student "The Scholar as a Person."—*B. Wellman* (Iowa).

1699. Sisson, E. D. An analysis of the occupational aims of college students. *Occupations*, 1938, 17, 211-215.—Students entering college aim at vocations which are in the majority of cases beyond their abilities. This is indicated by their low aptitude test scores and by their fathers' occupational levels. Data are presented on vocational choices and paternal occupations of 279 Wesleyan students.—*H. Schlosberg* (Brown).

1700. Smith, E. B. A syllabus of principles and techniques of educational measurements. Albany: State College Book Store, 1938. Pp. 68.—The author presents 43 sections, each introduced by a half dozen "Basic questions and problems for study," and concluding with a list of selected references for the investigation of the problems raised. The earlier sections are general in scope; the later deal with the various subject-matter fields, arranged in alphabetical order.—*L. A. Averill* (Worcester Teachers College).

1701. Smith, M. Attitude changes during a course in criminology. *Sch. & Soc.*, 1938, 48, 698-700.—At the University of Kansas sophomores taking a course in criminology and also elementary sociology students were given the Thurstone scales of attitude toward treatment of criminals, capital punishment, and law, at the beginning and end of the semester. Both groups showed small shifts away from punishment of criminals, toward capital punishment, and away from respect for the law, indicating that the criminology course had no differential effect. However, the criminology group, selected by their interest in the subject, were on the first scale more favorable to criminals and more

opposed to capital punishment. The ability of the students to discriminate between the three related attitudes studied is noteworthy.—*M. Lee* (Chicago).

1702. Spiegler, S., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the blacksmith. New York: Nat'l Occupational Conference, 1938. Pp. 7. \$0.10.—*R. R. Willoughby* (Brown).

1703. Spiegler, S., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the boilermaker. New York: Nat'l Occupational Conference, 1938. Pp. 7. \$0.10.—*R. R. Willoughby* (Brown).

1704. Spiegler, S., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the building contractor. New York: Nat'l Occupational Conference, 1938. Pp. 8. \$0.10.—*R. R. Willoughby* (Brown).

1705. Spiegler, S., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the cabinetmaker. New York: Nat'l Occupational Conference, 1938. Pp. 10. \$0.10.—*R. R. Willoughby* (Brown).

1706. Spiegler, S., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the dental mechanic. New York: Nat'l Occupational Conference, 1938. Pp. 7. \$0.10.—*R. R. Willoughby* (Brown).

1707. Spiegler, S., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the patternmaker. New York: Nat'l Occupational Conference, 1938. Pp. 8. \$0.10.—*R. R. Willoughby* (Brown).

1708. Spiegler, S., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the welder. New York: Nat'l Occupational Conference, 1938. Pp. 10. \$0.10.—*R. R. Willoughby* (Brown).

1709. Stevenson, E. N. An investigation into the relative effectiveness of three different methods of teaching general biology in a normal school. *J. exp. Educ.*, 1938, 7, 67-70.—Results of this investigation show that the lecture, lecture-discussion, and experimental methods are about equally effective in attaining the objectives of the survey course in general biology, as measured by standardized and teacher-made tests and other evaluating devices. With respect to both immediate and delayed retention and gain in knowledge of subject matter, the methods rank; first, experimental; second, lecture-discussion; and third, lecture. With respect to the ability to apply principles, the methods are nearly equal. With respect to the ability to solve problems, the experimental method is favored by slightly larger mean differences. With respect to the ability to perform in the laboratory, the methods are approximately equal. Student preference, as determined by questionnaire and interview, leans toward the traditional methods, but the experimental method is regarded as most interesting.—*H. W. Karn* (Pittsburgh).

1710. Strauss, A., & Werner, H. Deficiency in the finger schema in relation to arithmetic disability (finger agnosia and acalculia). *Amer. J. Orthopsychiat.*, 1938, 8, 719-725.—A case is cited which poses the "question as to whether there is a frequent relationship between deficiency in the finger schema and difficulties in number operations." On the basis of teachers' judgments and objective achievement tests, 28 high-grade defective boys were selected from the Wayne County Training School register. 14 cases were relatively poor in arithmetic and 14 were relatively good. Each boy was subjected to a battery of tests concerning the finger schema. The data show "an obvious relation between deficiency in the finger schema and deficiency in arithmetic achievement." It is believed that there are several specific factors that must be considered as underlying the number difficulty.—S. W. Bijou (Delaware State Hospital).

1711. Tinker, M. A. Trends in diagnostic and remedial reading as shown by recent publications in this field. *J. educ. Res.*, 1938, 32, 293-303.—Summary of the recent literature. Bibliography of 54 titles.—S. W. Fernberger (Pennsylvania).

1712. Tramer, M. Die Erziehungsmethoden gemäss den Störungen der Intelligenz und des Charakters beim Kinder. (Educational methods adjusted to disturbances of intelligence and character in the child.) *Verh. I. int. Kongr. Kinderpsychiat.*, 1937, 2, 89-110.—P. L. Krieger (Leipzig).

1713. Troyer, M. E. An experiment in controlled remedial reading using film materials. *Psychol. Bull.*, 1938, 35, 669.—Abstract.—A. W. Melton (Missouri).

1714. Tuxill, V., & Hoppock, R. An appraisal and abstract of available literature on the occupation of the nurse. New York: Nat'l Occupational Conference, 1938. Pp. 10. \$0.10.—R. R. Willoughby (Brown).

1715. Van Tassel, R. J., & Irvin, L. P. Miami language prognosis test. Oxford, Ohio: R. J. Van Tassel, Miami University, 1938.—The purpose of this test is prognosis in French; the test requires 33 minutes for administration.—(Courtesy *J. educ. Res.*).

1716. [Various.] Congrès international de l'enseignement primaire et l'éducation populaire organisé par le Syndicat National des Institutrices et des Instituteurs de France et des Colonies, Paris, 23-31 Juillet 1937. (International congress on primary teaching and popular education organized by the National Syndicate of Teachers in France and the Colonies, held at Paris, July 23-31, 1937.) Paris: Editions Sudel, 1937. Pp. 605.—The report of this congress is divided into four sections: I. The general aspects of the problem of the philosophy of education, covering primary teaching in France, the Anglo-Saxon countries, the Scandinavian countries, northwest Europe, Switzerland, Italy, Poland and the Baltic countries, Czechoslovakia, the Balkans, Spain, Latin America, and the far east (China,

India, Dutch Indies, and Japan). II. Psychology and sociology as applied to education, covering habit formation, the logic and sociology of children, measurement methods, orientation, etc. Among those taking part in the discussion of these questions were Guillaume, Koffka, C. Bühler, Piaget, Moore, Lahy-Hollebecque, E. Köhler, H. Piéron, H. Laugier, Wallon, Weinberg, and Prihoda. III. Methods of teaching, covering methods used in nursery and primary schools, the role of physical and of esthetic education in general education, and current conceptions of literature for children and the pedagogy of such literature. IV. National education and international co-operation, covering the important question of education for peace and for a better international understanding.—G. Goldman (Sorbonne).

1717. Wood, R. G. Bulletin of research activities of the Ohio scholarship tests. *Bull. Ohio St. Dep. Educ.*, 1938, Sept., R-2. Pp. 119.—This bulletin contains four studies on data collected from the Ohio scholarship tests given by the Ohio State Department of Education.—(Courtesy *J. educ. Res.*).

1718. Word, A. H., & Davis, R. A. Individual differences in retention of general science subject matter in the case of three measurable teaching objectives. *J. exp. Educ.*, 1938, 7, 24-30.—The purpose of this study was to determine the effect of the summer vacation on individual differences in the performance of seventh grade pupils on a test which measured: (1) ability to recall factual information; (2) ability to explain scientific phenomena; and (3) ability to draw conclusions from given data. Results show that individual differences increase between June and September testings for all subjects and for all parts of the test. The increase in individual differences is greater for Part III (ability to draw conclusions from given data) than for Part I or Part II.—H. W. Karn (Pittsburgh).

[See also abstracts 1170, 1232, 1253, 1286, 1294, 1296, 1373, 1395, 1488, 1522, 1533, 1545, 1557, 1563, 1590, 1595, 1604, 1613, 1622, 1719, 1726, 1729, 1730, 1736, 1744, 1758.]

## MENTAL TESTS

1719. Andrew, D. M., & Bird, C. The stability of new-type questions. *J. educ. Psychol.*, 1938, 29, 501-512.—A report on the consistency with which single-choice, analogy, wrong-word answer, and single-word completion items continue to differentiate students having one of five letter grades assigned to them in a course examination.—A. W. Melton (Missouri).

1720. Bender, L. A visual motor Gestalt test and its clinical use. *Res. Monogr. Amer. Orthopsychiat. Ass.*, 1938. No. 3. Pp. xi + 176. \$3.50.—This investigator had feeble-minded persons, primitive and civilized children, and mental patients copy 9 of Wertheimer's figures. Whereas Gestalt psychologists have considered perceived Gestalten to be determined by stimulus configurations, the present



results show: that there is a motility of the visual field which also operates in determining spatial relationships, that these patterns change with time in an adult individual as shown by the fact that the patterns drawn from tachistoscopic exposures are simple integrations, that the patterns tend to become more intricately integrated as maturation progresses, and that the motor reaction pattern (attitudes and complexes) of the individual participate in the perceptions. In disintegrating cerebral lesions these patterns tend to revert to more primitive levels, and as the brain recovers they tend to follow the laws of developmental maturation in returning to the higher integrative responses. In schizophrenia a dissociation in the Gestalt figures appears which often distorts them fundamentally. Manic-depressive and some psychoneurotic patients tend to include associations with other perceptual or emotional fields. Normal persons and malingerers were unable to neglect the essential principles characteristic of their maturational level. Standardization of the Gestalt function in a performance test for children is described.—*J. McV. Hunt* (Brown).

1721. **Champney, H., & Marshall, H.** Rater's minimal discrimination as a criterion for determining the optimal refinement for a rating scale. *Psychol. Bull.*, 1938, 35, 656.—Abstract.—*A. W. Melton* (Missouri).

1722. **Cuff, N. B.** A new self-scoring answer card. *Psychol. Bull.*, 1938, 35, 643.—Abstract.—*A. W. Melton* (Missouri).

1723. **Kopas, J. S.** The point-tally. A modified method of scoring the Strong vocational interest blank. *J. appl. Psychol.*, 1938, 22, 426-436.—24 of the professions scored by the Strong interest blank were arranged in 10 groups within which the professions correlated highly. For each of these areas of vocational interest, the heaviest weighted items were selected to make up the simpler scoring keys. The numbers of these items checked were merely counted as one part of the new score for the occupations falling into a group. The other part of the score for each occupation was the sum of the weights of those items which were more heavily weighted for each occupation. These two part scores were then combined to yield the total score by the simpler method. These new scores correlate from .49 to .71 with the standard scores for the occupations. In 313 tests scored by both methods, the area of highest interest was the same for 82% of the cases, whereas in only 2% did the highest area by the point-tally method fall outside the three highest areas by the standard method. The point-tally method offers a great advantage in economy of scoring time.—*S. Roslow* (Psychological Corporation).

1724. **Langmuir, C. R.** The stability of test score profiles. *Psychol. Bull.*, 1938, 35, 642.—Abstract.—*A. W. Melton* (Missouri).

1725. **Lorge, I., & Arsenian, S.** A comparison of the scores on the Spearman visual perception test,

Part I, administered by verbal and pantomime directions. *J. educ. Psychol.*, 1938, 29, 520-522.—The correlation of the Spearman visual perception test, part I, with CAVD scores was .58 when pantomime directions were used and .48 when verbal directions were used. The mean Spearman test score was significantly lower when pantomime was used. Since the difference between the *r*'s with CAVD was not significant, and the reliability of the Spearman scores was not changed when pantomime directions were given, it is concluded that pantomime and verbal directions give results similar in reliability and validity.—*A. W. Melton* (Missouri).

1726. **McElwee, E. W.** Qualitative differences in interpreting standardized norms. *J. juv. Res.*, 1938, 22, 169-176.—The author raises the question "whether the performance of retarded children should be measured by norms standardized with normal children, or whether another set of norms should be prepared based upon the performance of retarded children." Candidates for ungraded classes in New York City were studied by the use of the primary cylinder board, the Ellis memory-for-objects test, and the bead picture test. On the cylinder test retarded children with mental ages of 5, 6, and 7 years were compared with normal children with chronological ages of 5, 6, and 7 years. Retarded children work more rapidly than the normal children, who of course were younger. In the memory test, likewise, retarded children with a mental age of 6 scored higher than normal 6-year-old children. There was a similar superiority in the bead test for the retarded group.—*F. M. Teagarden* (Pittsburgh).

1727. **McNemar, Q.** The equivalence of the general factors found for successive levels on the new Stanford Revision. *Psychol. Bull.*, 1938, 35, 657.—Abstract.—*A. W. Melton* (Missouri).

1728. **Rosenzweig, S.** A basis for the improvement of personality tests with special reference to the M-F battery. *J. abnorm. soc. Psychol.*, 1938, 33, 476-488.—The M-F test for masculinity-femininity has the shortcoming of unduly emphasizing statistical empiricism at the expense of psychological significance, and is insufficient in its procedural aspects since it leaves considerable room for opinion-errors, refers excessively to past acquisitions of knowledge, limits responses unnecessarily to specific modes, and includes items rather distant from the immediate exemplification of the traits studied. To improve personality tests significantly the "experimental" instead of the "statistical" attitude must be adopted as a basis. Good tests are repetitions of experimental situations, the latter being based upon well-defined hypotheses. Personality tests must rely chiefly upon performance or actual behavior; in so far as any expressions of opinion by the subject are included, such responses must be treated purely as opinions.—*C. H. Johnson* (Portland, Ore.).

1729. **Stalnaker, J. M.** Weighting questions in the essay-type examination. *J. educ. Psychol.*, 1938, 29, 481-490.—The author considers the question of

weighting of essay-type examination questions from the theoretical and practical points of view, and makes recommendations regarding the use of weights.—*A. W. Melton* (Missouri).

1730. Wellman, B. L. The intelligence of preschool children as measured by the Merrill-Palmer scale of performance tests. *Univ. Ia Stud. Child Welf.*, 1938, 15, No. 3. Pp. 150.—510 Merrill-Palmer tests were given to 281 children. Several types of analyses were made to bring out the effects, if any, of preschool attendance. Significant gains were made over the winter months when the children were enrolled in preschool. Over the summer vacation months the changes were not significant. The difference in gains was not attributable to amount of previous experience with the test, initial status, age, or interval between tests. The gains in IQ made over the winter months were inversely proportional to initial IQ level; the correlation of  $-.43 \pm .07$  contrasted with the positive correlation of  $.40 \pm .10$  on retests at an interval of only one week. It was concluded that the causes of change were not the same over the brief interval and the longer interval. The cause of change on immediate retest appeared to be practice effects, while the changes over the longer interval appeared to be, in part at least, the resultant of environmental stimulation. The changes in Merrill-Palmer ability were less clean-cut than in Binet ability. No significant differences were revealed between children from different occupational classes or between different educational levels of parents, although differences in Binet ability were found. The Merrill-Palmer and Binet tests were found to measure somewhat different types of abilities. Early Binets were more highly related to later Binets up to periods of six years than Merrill-Palmers were related to later Binets. Comparisons with the results of previous investigators were made throughout the study.—*B. Wellman* (Iowa).

[See also abstracts 1162, 1316, 1386, 1515, 1642, 1651.]

#### CHILDHOOD AND ADOLESCENCE

1731. [Anon.] Home play and play equipment for the preschool child. *U. S. Child. Bur. Publ.*, 1937, No. 238. Pp. 20.—*R. R. Willoughby* (Brown).

1732. Bell, H. M. Youth tell their story. Washington: American Council on Education, 1938. \$1.50.—This is a study of conditions and attitudes of young people between the ages of 16 and 24. What is the youth problem in the United States and what does youth think of this problem? Conclusions are drawn from a study of Maryland youth, rural and urban, negro and white. Young people are not bitter and rebellious, but apathetic, accepting their given lot meekly. Home and church appear not to have lost their hold on youth. The article is illustrated and the comments by the young people themselves are given.—*J. Robertson* (Brown).

1733. Bruce, J. W. Behavior disorders in children. *Tenn. St. med. Ass. J.*, 1938, 31, 183-187.—*J. Robertson* (Brown).

1734. Butavand, A. Réflexions sur la psychologie de quelques petits enfants malades hors de chez eux. (Reflections on the psychology of young children sick away from home.) *Rev. méd.-soc. Enfance*, 1927, 5, 350-354.—*G. Goldman* (Sorbonne).

1735. Cowan, E. A. Some emotional problems besetting the lives of foster children. *Ment. Hyg.*, N. Y., 1938, 22, 454-458.—A study of the difficulty of making the transition from a natural home to a foster home, obtained from studying case histories and holding interviews with foster children at the Wichita Child Research Laboratory. The natural home, before the necessity for placement, is usually of such a character that any child living in it would develop personality problems. The standards of the natural home and the foster home are usually widely different. The children feel themselves at a social disadvantage with children who are in natural homes. There may be too little of common experience between the two homes. To lessen these difficulties, pre-placement temporary boarding care, a more concrete picture of the child's natural home, helping the foster child to adjust to reality courageously, and a discussion with the child of his natural home, should all be instituted.—*P. Brand* (New York City).

1736. Darley, J. G. Proportional sampling methods and some results of the General College adolescence study. *Psychol. Bull.*, 1938, 35, 640.—Abstract.—*A. W. Melton* (Missouri).

1737. Delobel, —. Les jeux des enfants. Leur influence en hygiène. (Children's games; their influence on hygiene.) *Rev. méd.-soc. Enfance*, 1937, 5, 268-275.—Play in children is a stimulant to growth and to the nervous system. It acts on their mental and intellectual development, exercises and develops the will, causes and trains sociability, and, consequently, is a hygienic agent of the first order.—*G. Goldman* (Sorbonne).

1738. Duncker, K. Experimental modification of children's food preferences through social suggestion. *J. abnorm. soc. Psychol.*, 1938, 33, 489-507.—By making children, either in groups or under the influence of a story, choose certain foods, there can be set up a high degree of social suggestion in the direction of imitating actual or imaginary predecessors. This social influence is dependent upon group formation, identification, and prestige. The influence tends to survive the original social situation, but declines with the passage of time. It is probable though not certain that, despite the somewhat ephemeral conditions of the experiments, influence came to affect the sensory qualities of the food.—*C. H. Johnson* (Portland, Ore.).

1739. Freytag, F. F. Clinical study of a child with problems. *Delaware St. med. J.*, 1938, 10, 91-94.—*J. Robertson* (Brown).

1740. Fries, M. E., & Lewi, B. Interrelated factors in development (a study of pregnancy, labor, delivery, lying-in period and childhood). *Amer. J. Orthopsychiat.*, 1938, 8, 726-752.—This paper was presented with motion pictures at the 1938 meeting of the American Orthopsychiatric Association. It is Fries' eighth contribution from her intensive investigations of child development. Her aim is to study the child as a whole as well as in its individual phases, in order to determine "how and why" children develop as they do and what can be done to encourage satisfactory total development." The present paper describes "how the material was organized and interpreted at the end of the lying-in period in order to formulate a tentative prognosis as to future development." Three case histories are recorded in detail. There is an appendix which explains how 5 charts were used for recording data on newborn infants during the lying-in period, and a bibliography of 43 titles.—S. W. Bijou (Delaware State Hospital).

1741. Grimm, H. Reifungsstufen bei mittel-deutschen Stadtkindern. (Pubertal stages in urban children in central Germany.) *Z. Rassenk.*, 1938, 8, 202-204.—P. L. Krieger (Leipzig).

1742. Guindés, —. Sur les caractères de la motilité dans la première enfance. (On the characteristics of motility in early infancy.) *Rev. méd.-soc. Enfance*, 1937, 5, 355-360.—G. Goldman (Sorbonne).

1743. Halverson, H. M. Variations in pulse, respiration, and limb movements during certain phases of infant behavior. *Psychol. Bull.*, 1938, 35, 682-683.—Abstract.—A. W. Melton (Missouri).

1744. Hamlin, P. G. Psychological conditioning. *Virginia med. Mo.*, 1938, 65, 605-608.—Young children do not differentiate, and it is only when the unpleasant realities of existence force themselves inexorably upon the child's mind that he makes comparisons and becomes aware of differences and shades of meaning. The young child's substitute for differentiation is identification, and one individual who acts the same way as another is identified in the child's mind with the other. To elicit the child's interest the teacher must do something more than present the facts correctly; the teacher must also arouse some emotion in the child. Parents and teachers must have insight into the fantasy life of children to deal intelligently with them. A set of fancies of one child stimulates the verbalized actions of the other. No comparisons are made; what occurs is merely the exhibition of greater rival possessions. These remarks refer largely to children of the preschool age. Hamlin assumes that definite memory occurs most often between one and two years of age. Problems of delinquency are discussed.—W. Marshall (Appleton Clinic, Wis.).

1745. Hanselmann, H. Le mensonge et le vol chez l'enfant. (Lying and thieving in children.) *Rev. méd.-soc. Enfance*, 1937, 5, 406-417.—G. Goldman (Sorbonne).

1746. Jersild, A. T. Children's radio programs. *Talks*, 1938, 3, 41-45.—(*Child Developm. Abstr.* XII: 2205).

1747. Jones, H. E., & Bayley, N. Mental development and cultural-economic factors: a nine-year study. *Psychol. Bull.*, 1938, 35, 681-682.—Abstract.—A. W. Melton (Missouri).

1748. Kirkpatrick, E. L. Rural young people and the local community. *Sociol. soc. Res.*, 1938, 22, 528-537.—(*Child Developm. Abstr.* XII: 2222).

1749. Koch, E. W. Wesen und Abschluss der Wachstumsänderung: stabilisierter Schnellwuchs des Menschen. (The nature and outcome of changes in growth; stabilized rapid growth in man.) *Dtsch. med. Wschr.*, 1938, 64, 1068-1070.—P. L. Krieger (Leipzig).

1750. Mahon, R. A partir de quel âge le fœtus peut-il présenter des mouvements actifs? (At what age are active movements found in the fetus?) *Bull. Soc. Obstét. Gynéc. Paris*, 1937, 26, 61.—The author reports a case which gives additional proof that movement may be present at the beginning of the third month. Thus perception of such movement can no longer be used to determine age of the fetus.—G. Goldman (Sorbonne).

1751. McFarland, M. B. Relationships between young sisters as revealed in their overt responses. *Child Developm. Monogr.*, 1938, No. 23. Pp. xi + 230. \$3.50.—Each of 22 pairs of sisters, approximately unselected except that the older sister was under 7, was systematically observed together for 235 minutes (5 sessions). The time spent in social interaction averaged 40%, and was substantially correlated with both CA and MA; a good deal of this time was spent in imaginative play and co-operative activity; parallel play without overt interaction averaged 13%. The time in conflict averaged 11% of the interaction time, and was correlated with physiological condition; there was no consistent tendency for either sister to be the initiator or the winner. Rivalry appeared to be related primarily to the immediate situation. Direction, submission, imitation, resistance, sympathy, protection, helping, giving and lending, and affectionate responses were also studied. It is suggested that "the child holds certain basic attitudes toward her sister . . . developed through . . . experiences in her contacts with her sister; but, over a short period of time, . . . fairly stable. . . . Because the child's experiences with her sister were varied, her attitudes were varied and often conflicting." There are extensive protocols, some diagrams, tables, and illustrations, and a bibliography of 33 items.—R. R. Willoughby (Brown).

1752. McGraw, M., & Weinbach, A. P. Quantitative behavior analyses in longitudinal studies of infants. *Psychol. Bull.*, 1938, 35, 683.—Abstract.—A. W. Melton (Missouri).

1753. Miller, C. H. Value of certain standard tests for a study of dramatic talent. *J. soc. Psychol.*, 1938, 9, 437-449.—Comparison of teachers' ratings



of 68 high school students of dramatics and test scores obtained from administration of 7 of the standardized intelligence, vocabulary, personality, and values inventories yielded no significant correlations.—*E. D. Hunt* (Brown).

1754. Partridge, E. J., Crichton Miller, H., Ross, T. A., & Crookshank, F. G. The management of early infancy, puberty and adolescence; the psychological approach; the neurotic character. *Med. Pamphl. indiv. Psychol.*, 1938, No. 18. Pp. 64.—*R. R. Willoughby* (Brown).

1755. Peller, S. Nature and nurture in mental development. *Sociol. Rev.*, 1937, 29, No. 1.—*R. R. Willoughby* (Brown).

1756. Pichon, E. Le rôle de la famille dans le développement affectif et moral. (The role of the family in affective and moral development.) *Rev. méd.-soc. Enfance*, 1937, 5, 321-334.—*G. Goldman* (Sorbonne).

1757. Ribble, M. A. Clinical studies of instinctive reactions in newborn babies. *Amer. J. Psychiat.*, 1938, 95, 149-160.—A study of the earliest types of biological functioning which precede and lead up to cerebration is highly important for gaining knowledge of the sources and dynamics of mental disease. The paper deals with the particular adaptation which must take place at birth from the fetal method of eating and breathing to the nose-lung and mouth-gut mechanisms necessary after delivery and the instinctive reaction of the young organism to difficulties in making this adjustment. There is extreme variability in the breathing and mouth-ing activity of "normal" infants. True sucking, however, has to be initiated or learned, since it is an adaptation to a new situation. "Vegetative" babies who show little motility in the first few days can establish regular eating and breathing functions through frequently repeated stimulation of the oral zone. Sucking has a quieting effect; it is a means of relieving tension. "It is probable that the nervous energy is discharged into the cortex over oral pathways which are those best developed at birth." A case of sucking frustration is discussed. The adaptation to life outside the uterus is most successfully brought about through the stimulation of sucking and through crying activity. "Apparently, the pathway of progressive development toward an integrated cortical type of behavior lies in these functions, and babies who have enough breathing and sucking activity rapidly attain a good organization of the eating and breathing functions."—*R. Goldman* (Boston Psychopathic Hospital).

1758. Skeels, H. M., Updegraff, R., Wellman, B. L., & Williams, H. M. A study of environmental stimulation: an orphanage preschool project. *Univ. Ia Stud. Child Welf.*, 1938, 15, No. 4. Pp. 191.—The study determined the effects of preschool education, through the medium of a preschool, introduced into the lives of underprivileged children living in an orphanage. An experimental group attended preschool for several hours a day while a control group did not. The two groups were initially equated in

intelligence, age, sex, length of previous residence in the orphanage, nutritional status, and presence or absence of sensory defects. The study extended over a three-year period. The control orphanage environment was found to be unfavorable to development in intelligence, language achievements, vocabulary, general information, motor development, social behavior, and social competence. The effect of long residence for the control group was to bring all children, regardless of initial intelligence classification, to high grade feeble-mindedness or borderline classification. The trend for the preschool children was toward normality in intelligence. Both preschool and control children were markedly retarded in vocabulary and general information. There was unevenness of development of various motor achievements. The rate of development of a skill appeared to be related to opportunities for its practice. Marked differences between preschool and control children were found in respect to social competence on the Vineland scale. Not one of the areas studied supported a concept of maturation as a physiological process little influenced by training.—*B. Wellman* (Iowa).

1759. Stirniman, F. Les réactions du nouveau-né contre l'enchaînement. (Reactions of the newborn child against restriction.) *Rev. franç. Pédiat.*, 1937, 13, 496-502.—To prevent newborn babies from injuring themselves, the nurses at the Sanatorium de Ste. Anne tie mittens on them. The author observed 150 of these nurslings and found a certain number who showed a definite tendency to rid themselves of these mittens by means of a series of movements, frequently interrupted in character, which the author calls the reaction to restriction. This reaction seems to correspond to an innate, instinctive disposition which has no relation to vision and which indicates that the need for freedom is already present in the newborn child.—*G. Goldman* (Sorbonne).

1760. Stott, L. H. The relation of certain factors in farm family life to personality development in adolescents. *Res. Bull. Neb. agric. Exp. Sta.*, 1938, No. 106. Pp. 46.—This study is concerned with the relationship between certain farm-home environmental influences and the personality development of the children of the family. Environmental factors were evaluated on the basis of questionnaires; they were correlated with the results of nine personality scales. Coefficients were low (less than .45), but some trends were indicated. Some of the factors, in order of importance, are listed: (1) the group including the activities, participation, and person-to-person interactions of the children; (2) those items concerned with the activities and health of the parents; and the physical aspects of the home environment. Slight but reliable sex differences were noted.—*F. W. Finger* (Brown).

[See also abstracts 1276, 1295, 1315, 1321, 1328, 1345, 1401, 1423, 1435, 1469, 1472, 1474, 1481, 1488, 1501, 1509, 1552, 1562, 1583, 1614, 1669, 1712, 1730.]

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